

# Annual Report **2004**



# on all fronts

---

The Wildlife Conservation Society saves wildlife and wild lands. We do so through careful science, international conservation, education, and the management of the world's largest system of urban wildlife parks, led by the flagship Bronx Zoo. Together, these activities change individual attitudes toward nature and help people imagine wildlife and humans living in sustainable interaction on both a local and a global scale. WCS is committed to this work because we believe it essential to the integrity of life on Earth.





# contents

## living institutions **14**

Through its four zoos and an aquarium, the Wildlife Conservation Society informs people about the importance of nature and wildlife, inspires visitors to care about and work for the conservation of wild animals, and sets the highest standard for urban wildlife parks in the world.

## living classrooms **30**

Through its award-winning programs and curricula, the WCS Education Division brings to youngsters and adults an awareness of nature and ecological principles and an understanding of conservation issues from the Adirondacks to Zambia.

## living landscapes **40**

With its legacies of field research and living collections, and more than a century of experience, WCS works with scientists to find strategies for conservation on large scales and in complex environments where interactions with human interests result in conflict.

Chairman's Letter **4**

President's Letter **6**

Trustees and Advisors **8**

WCS at Work **10**

Wildlife Conservation Projects **48**

Public Affairs **60**

Financial Report **66**

WCS Events **70**

Contributors **74**

Committees **86**

WCS Staff **88**

WCS Publications **94**

Facts, Awards, Credits **96**

Contents: Imani and her youngster, Shani, relax in the Bronx Zoo's Congo Gorilla Forest. This 6.5-acre African rain-forest environment explains what a rain forest is, how it works, why it is threatened, and how people can help save it. Front cover: Biscuit was born at the Bronx Zoo's Himalayan Highlands on June 5, 2003. The zoo has exhibited snow leopards since 1903, and Biscuit is the 93rd cub born here. Back cover: In the WCS Global Carnivore Program, field conservationists study big cats around the world, from Belize to Russia to Wyoming to South Africa. Page 1: a Malagasy pygmy kingfisher in Masoala National Park, Madagascar, where WCS has worked since 1997.







## From New York's Westchester County to India, the work of WCS is the best hope for the world's treasured and threatened wildlife.

DAVID T. SCHIFF

AS YOU READ THIS ANNUAL REPORT, you are taking an important step in conservation action: You are discovering more about the natural world, and connecting with a global organization that is its most effective defender. Your vital involvement in ensuring a future for all species—including our own—begins here.

I am more proud than ever of WCS, our people, and our work to protect wildlife and wild lands. You will learn why within these pages. From our headquarters at the Bronx Zoo, to field projects in the last wild places, to classroom curricula in California and China, no other organization integrates so many unique resources into one tremendous force for conservation.

From New York's Westchester County to Kenya to Bolivia to India, the span of our work is the best hope for our treasured and threatened wildlife. We have identified 50 globally important landscapes and marine habitats across North

America, Latin America, Africa, and Asia to receive our focused attention. We have become the leader in collaborating with governments and governmental entities to manage protected areas, including the world's largest tiger reserve in Myanmar and the national park system in Gabon.

In our own country, through expanded outreach in Washington, D.C., WCS experts are shaping the national dialogue on major issues, from funding for endangered species protection to the need for a "One World, One Health" approach to the monitoring of wildlife, domestic animal, and human diseases.

At our zoos and aquarium in the City of New York, nearly four million visitors a year experience award-winning exhibits that directly connect them to our international projects, and enable them to take meaningful action for wildlife in wild places.

Each year, we serve 100,000 children and hundreds of teachers in the New

York City public school system. Our education programs have received prestigious awards from the National Science Board and the Institute of Museum and Library Services. The use of WCS curricula is growing; our materials and methods are used in classrooms in all 50 states, as well as in Cuba, India, and Mexico.

The vast and unparalleled reach from our facilities into classrooms and into the wild has never been so essential. Habitat destruction and human exploitation of natural resources have brought about dramatic declines in wild animal populations. Global warming is no longer just a theory. All the while, complicated and critical environmental issues are far too frequently reduced to sound bites. On the world stage, the voices of environmental advocates must be raised, loudly, so that we can more meaningfully affect decision-makers in a time of increasing globalization.

WCS's mission and resources are perfectly poised to meet this challenge. We base our efforts not only on the protection of key species and habitats, but on the fundamental need to firmly fix humans in the conservation equation—to find solutions that allow people and nature to flourish together, and to inspire individuals to care, become involved, and realize that saving wildlife is, in fact, saving ourselves.

Individual action is at the heart of conservation, and WCS. For nearly 110 years, our work has been driven by the dedication and passion of remarkable men and women. This year, the WCS family lost two such individuals with the deaths of Laurance S. Rockefeller and Frank Y. Larkin. Laurance became a WCS Trustee 70 years ago; Yoke joined the Board in 1973. Each devoted decades of his life to wildlife, and shaped our organization with integrity, commitment, and vision. They helped build the foundation for today's new, emboldened WCS, and their advancement of conservation for the enrichment and survival of humanity lives on as our inspiration.



## Partners, Friends, and Supporters

### BEST FRIENDS

The Wildlife Conservation Society is deeply indebted to The Robert W. Wilson Fund for matching grant funds that this year totaled more than \$16 million in support of our international conservation programs. The incentive of the challenge match has inspired and attracted essential new support for our work around the globe.

We extend special appreciation to Edith McBean for her wide-ranging support for WCS's international conservation programs, and recognize her philanthropic leadership, which will allow us to leverage significant funding from the United Nations Foundation and UNESCO for our work in Central Africa.

WCS is grateful for the dedicated commitment and generosity of our friends who have each made contributions totaling one million dollars or more this year. We offer our thanks to:

The Christensen Fund, for its scholarship fund and challenge grant to mentor and encourage the brightest young conservationists across the developing world, and the next generation of conservation biologists in Papua New Guinea.

The Liz Claiborne/Art Ortenberg Foundation, for contributions to an array of field conservation programs, including major support for jaguar conservation as well as our work in Myanmar and the forests of Central Africa.

The John D. and Catherine T. MacArthur Foundation, for support to our international conservation programs, including new grants this year to projects in Papua New Guinea and Colombia.

The Gordon and Betty Moore Foundation, for its continued support of the Gabon national park system, and for its generosity in support of our Amazon basin landscape programs.

The Howard Phipps Foundation, for its leadership gift to the Bronx Zoo Renaissance, which will help WCS renew the historic legacy of this great wildlife park while transforming it into a global headquarters for international conservation and a center for conservation education.

The Robertson Foundation, for its powerful gift, which resulted in formal dedication of Tiger Mountain to the employees, both

past and present, of Tiger Management Corporation. The impact of this gift will span every facet of WCS far into the future, from the guest experience at the Bronx Zoo to the conservation of big cats in the wild.

In addition, we would like to recognize Eleanor Briggs, Guy Cary, and the Derald H. Ruttenberg Foundation, who this year have joined our circle of Best Friends and Foundations, whose cumulative philanthropy to WCS exceeds one million dollars.

### SUPPORT ACROSS WCS

WCS is grateful to those donors who have provided significant unrestricted support, allowing us to allocate funds where the need is greatest. We extend our appreciation to Enid A. Haupt, The Hess Foundation, Inc., the Irwin Family, New York Community Trust—William E. Flaherty Family Fund, Katharina Otto-Bernstein, The Starr Foundation, Mr. and Mrs. Thomas Unterberg, Ward W. and Priscilla B. Woods, and an anonymous donor. In addition, WCS is grateful for unrestricted support from the estates of Ruth C. Arps and Elisabeth S. Livingston, and the Agnes Scholl Credit Shelter Trust.

To that special group of philanthropists who during the year supported projects and programs both across the institution for our zoos and aquarium and around the globe for our international conservation programs, we offer our gratitude. Our thanks go to Mr. and Mrs. Brian J. Heidtke, the Irwin Family, the Schiff Family, Allison and Leonard Stern, and two anonymous donors.



A pair of lions rest in the Bronx Zoo's African Plains exhibit, one of the first zoo habitats to juxtapose predators and their prey. In East Africa, WCS field conservationists are studying the ecology and behavior of lions and other carnivores in a livestock-ranching area.





## The best hope for conservation will include the private sector and the non-profit world collaborating in forward-looking partnerships.

DR. STEVEN E. SANDERSON

THREE YEARS AGO IN THESE PAGES I began to talk about the transformation of the Wildlife Conservation Society from an era of conservation-oriented science to an era of science-based conservation action, from a historic New York cultural institution into a global organization. This year I can report that the transformation is well under way.

In 2004, we took the first big steps toward a \$220 million Bronx Zoo and New York Aquarium Renaissance by securing a strong foundation of public and private funding for our capital needs. For the first time in our history, we undertook a tax-exempt debt issue to restore the historic Bronx Zoo campus and “re-master” the Aquarium. We also completed the beautiful Bronx River exhibit—Mitsubishi Riverwalk—which highlights our commitment to local con-

servation in New York. And we have begun the creation of a year-round butterfly exhibit, a unique insect carousel, a new shark exhibit, and a brand-new wild dog habitat that will thrill our visiting public and enhance their appreciation of our role in the world of wildlife conservation action.

We have also launched Greenprint for Tomorrow, a visionary plan that integrates conservation in the field with the curatorial work in our Living Institutions, wildlife health with human poverty and well-being, and scientific research with conservation action. We have reiterated our commitment to wildlife, exploration, and the conservation of great landscapes worldwide. Greenprint for Tomorrow will be the foundation for an extended effort to fund our global conservation work in perpetuity.

This year, I traveled with trustees and staff to Madagascar (page 12), where WCS works with the government, other conservation organizations, and Zoo Zürich to protect a truly spectacular conservation landscape. The collaboration we have accomplished in Madagascar is emblematic of our transformation. In discussions with government officials, private organizations, and local communities there, we have been able to offer a true partnership for conservation, based on long-term local presence, independent funding, and respectful support for the government’s efforts to triple the lands under protection.

At home, in 2006, we will complete the \$35 million restoration of the historic Bronx Zoo Lion House. The signature exhibit will be *Madagascar!*—another landmark WCS exhibit dedicated to conservation. *Madagascar!* will provide a unique window for our guests to view that island’s spectacular wildlife and to support its protection.

One of our most exciting accomplishments has been the inauguration of a partnership with Goldman, Sachs & Co. and the Chilean conservation community to protect 680,000 acres of wild lands in Tierra del Fuego. After extensive discussions, Goldman Sachs transferred ownership of this swath of snow-capped mountains, peat bogs, and old-growth forests to WCS, along with a generous gift to ensure its long-term conservation. Their commitment to an alliance with WCS will help ensure our success.

For some time, I have argued that the best hope for conservation will include the private sector and the non-profit world in forward-looking partnerships. As we put a unique New York stamp on that hope through the Goldman Sachs alliance in Tierra del Fuego, WCS continues to transform its own conservation practice and reconfirms the role of a historic New York cultural institution in the protection of our world for future generations. I look forward to reporting more exciting achievements next year.

## Partners, Friends, and Supporters

### LIVING LANDSCAPES

In addition to those named on page 5, we extend special thanks to those donors who provided significant support for our international conservation field programs on multiple continents and oceans around the globe, as well as our cross-cutting programs headquartered in New York.

We thank Nancy Abraham and Arnold Moss, Mr. and Mrs. Frederick W. Beinecke, Conservation International–Critical Ecosystem Partnership Fund, Disney Wildlife Conservation Fund, Mr. and Mrs. Robert G. Goellet, Richard and Rhoda Goldman Fund, International Union for the Conservation of Nature (IUCN), National Fish and Wildlife Foundation, National Geographic Society, David and Lucile Packard Foundation, World Wildlife Fund, and one anonymous donor.

Conservation efforts across Africa received additional important support from Conservation International–Global Conservation Fund, Robert Wood Johnson 1962 Charitable Trust, Zoo Zürich, and an anonymous donor.

Our Asia programs also benefited from the generosity of 21st Century Tiger, Eleanor Briggs, and National Fish and Wildlife Foundation and ExxonMobil Save The Tiger Fund.

The Marine Program is grateful for significant support from the Stavros S. Niarchos Foundation, The Pew Fellows Program in Marine Conservation, and The Pew Charitable Trusts.

In North America, the Laura Moore Cunningham Foundation and the Wilburforce Foundation provided critical funding.

Our Living Landscapes program thanks The Tinker Foundation for supporting a review of community-based conservation across Latin America.

### LIVING INSTITUTIONS

Our Living Institutions benefited from a group of donors who supported our zoos and aquarium in multiple ways, recognizing the need to build state-of-the-art exhibits, to maintain the health and enhance the well-being of our living collections, and to educate the public about the value of wildlife conservation. We are grateful to Jonathan L. Cohen, Susan and Jack Rudin, Virginia and Warren Schwerin, and Joan O. L. Tweedy.

The New York Community Trust, Caroline N. Sidnam, and Pamela M. Thye generously supported the critically important programs of Wildlife Health, helping to underwrite work in our Living Institutions as well as the work done internationally through the Field Veterinary program.

WCS is particularly grateful to those donors who have offered support for our exhibits. The new Mitsubishi Riverwalk exhibit at the Bronx Zoo received significant gifts from the Charles Hayden Foundation and Mitsubishi International Corporation Foundation. The Bronx Zoo's *Madagascar!* exhibit received important assistance from The Bodman Foundation, which made a generous grant in honor of longtime WCS Honorary Trustee Guy G. Rutherford. Now celebrating its five-year

anniversary, the Congo Gorilla Forest exhibit received support from the Robert Wood Johnson Jr. Charitable Trust.

The Living Institutions' Animal Enrichment Program received important funding from Bristol-Myers Squibb Company.

The Edward John Noble Foundation continued its substantial support of the Wildlife Survival Center on St. Catherine's Island.

WCS's national and international education programs benefited from the generosity of the Horace W. Goldsmith Foundation and Howard Hughes Medical Institute.



White-footed sportive lemurs, or lepilemurs, use large digital pads on their fingers and toes to cling to trees in their native forests of southern Madagascar (above). WCS has been working to conserve wildlife in Madagascar for more than ten years. We are also creating a brand-new exhibit, *Madagascar!*, at the Bronx Zoo, which will give guests a close-up view of the island's unique wildlife and an opportunity to help us protect it.



# trustees and advisors



## Board of Trustees

(as of October 31, 2004)

### OFFICERS

David T. Schiff,  
*Chairman of the Board*  
Howard Phipps, Jr.,  
*Chairman Emeritus*  
Ward W. Woods,  
*Chairman, Executive Committee*  
Edith McBean,  
*Vice Chairman*  
Mrs. Gordon B. Pattee,  
*Vice Chairman*  
Mrs. Leonard N. Stern,  
*Vice Chairman*  
John N. Irwin III,  
*Treasurer*  
Robert Wood Johnson IV,  
*Secretary*  
W.B. McKeown,  
*Deputy Secretary*

### TRUSTEES

Jane Alexander  
Frederick W. Beinecke  
Eleanor Briggs  
C. Diane Christensen  
J. Michael Cline  
Jonathan L. Cohen  
Mrs. Charles A. Dana, Jr.  
Katherine Lange Dolan  
Robert Esnard  
William E. Flaherty  
Murray Gell-Mann

Bradley Goldberg  
John D. Goldman  
Paul A. Gould  
Jonathan D. Green  
Judith Hamilton  
Brian J. Heidtke  
John B. Hess  
John N. Irwin III  
Robert Wood Johnson IV  
David R. Jones  
Anita L. Keefe  
Elyssa Kellerman  
Michael J. Kowalski  
James M. Large, Jr.  
Edith McBean  
Eugene R. McGrath  
Frederick A. Melhado  
Ambrose K. Monell  
Mrs. George K. Moss  
Carl A. Navarre, Jr.  
Katharina Otto-Bernstein  
Mrs. Gordon B. Pattee  
Howard Phipps, Jr.  
Julian H. Robertson, Jr.  
Ashley R. Schiff  
David T. Schiff  
Virginia Schwerin  
Walter C. Sedgwick  
Michael H. Steinhardt  
Mrs. Leonard N. Stern  
Daniel K. Thorne  
Andrew H. Tisch  
Ann Unterberg  
Ward W. Woods  
E. Lisk Wyckoff, Jr.

Barbara Hrbek Zucker

### EX OFFICIO TRUSTEES

Hon. Michael R. Bloomberg,  
*Mayor, City of New York*  
Hon. William C. Thompson, Jr.,  
*Comptroller, City of New York*  
Hon. Gifford Miller,  
*Speaker, New York City Council*  
Hon. Adrian Benepe,  
*Commissioner, Parks and Recreation, City of New York*  
Hon. Kate D. Levin,  
*Commissioner, Cultural Affairs, City of New York*  
Hon. Adolfo Carrión, Jr.,  
*President, Borough of The Bronx*  
Hon. Marty Markowitz,  
*President, Borough of Brooklyn*  
Steven E. Sanderson, *President and CEO, Wildlife Conservation Society*

### LIFE TRUSTEES

Mrs. Vincent Astor  
John Elliott, Jr.  
Robert G. Goelet  
Enid A. Haupt  
Frank Y. Larkin\*  
Laurance S. Rockefeller\*  
*\*deceased*

### HONORARY TRUSTEES

George F. Baker III  
Roscoe C. Brown, Jr.

Guy Cary  
Mrs. Edgar M. Cullman  
C. Sims Farr  
Dr. Henry Clay Frick II  
William Gruenerwald  
John R. Hearst, Jr.  
Hon. Anthony D. Marshall  
Peter Matthiessen  
Eben W. Pyne  
Hon. Guy G. Rutherford  
Dr. Judith P. Sulzberger  
Mrs. Richard B. Tweedy  
Sue Erpf Van de Bovenkamp  
Richard A. Voell

### BOARD OF ADVISORS

Hon. Rolando T. Acosta  
Mrs. Rand V. Araskog  
Cynthia Lewis Beck  
Harry L. Bettis  
Gilbert Butler  
Glenn Close  
William G. Conway  
Gary C. Fink  
Lori W. Fink  
Candice K. Frawley  
Alexandra G. Goelet  
Robert Gardiner Goelet  
Judson C. Green  
Curtis A. Harris  
Christopher B. Hockett  
Christopher W. Johnson  
Robert W. Kean, Jr.  
Israel Klabin  
Elizabeth Kenny Lack



Richard I. Lesser  
 Susan Lytle Lipton  
 William B. Lloyd  
 Peter J. Madonia  
 Mrs. Roman Martinez IV  
 Terence J. Mitchell  
 Elizabeth P. Munson  
 John S. Newberry IV  
 Ralph Da Costa Nuñez  
 Anne L. Pattee  
 Merritt Paulson  
 George D. Phipps  
 Jonathan Rinehart  
 Charles W. Russell, Jr.  
 Katherine Ruttenberg  
 Dr. Jeffrey A. Sachs  
 Peter G. Schiff  
 Caroline N. Sidnam  
 Mrs. Joseph R. Siphron  
 Bradford D. Smith  
 John M. Stephenson  
 Mrs. John G. Stevenson  
 Craig M. Taylor  
 Patrick J. Thomas  
 Terence Hastings Thorn  
 Pamela M. Thye  
 Alan N. Weedon  
 Mrs. Charles L. Wilson III  
 Art Wolfe  
 Stephanie E. K. Borynack,  
*ex officio*  
 Lauren L. Kisner,  
*ex officio*  
 Christopher H. Manice,  
*ex officio*

## Standing Committees

### AUDIT COMMITTEE

Brian J. Heidtke,  
*Chairman*  
 Bradley Goldberg  
 James M. Large, Jr.

### COMPENSATION COMMITTEE

John N. Irwin III,  
*Chairman*  
 Jonathan L. Cohen  
 Mrs. Leonard N. Stern  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*

### DEVELOPMENT COMMITTEE

Ward W. Woods,  
*Chairman*  
 J. Michael Cline  
 Jonathan L. Cohen  
 Mrs. Charles A. Dana, Jr.  
 William E. Flaherty  
 Edith McBean  
 Mrs. Gordon B. Pattee  
 Mrs. Leonard N. Stern  
 Andrew H. Tisch  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*

### EXECUTIVE COMMITTEE

Ward W. Woods,  
*Chairman*  
 Frederick W. Beinecke  
 J. Michael Cline  
 William E. Flaherty  
 Brian J. Heidtke  
 James M. Large, Jr.  
 Edith McBean  
 Eugene R. McGrath  
 Frederick A. Melhado  
 Mrs. George K. Moss  
 Mrs. Gordon B. Pattee  
 Mrs. Leonard N. Stern  
 Andrew H. Tisch  
 Ann Unterberg  
 John N. Irwin III,  
*ex officio*  
 Robert Wood Johnson IV,  
*ex officio*  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*

### FINANCE COMMITTEE

John N. Irwin III,  
*Chairman*  
 William E. Flaherty  
 Bradley Goldberg  
 Paul A. Gould  
 James M. Large, Jr.  
 Mrs. George K. Moss  
 Daniel K. Thorne  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*

### INVESTMENT COMMITTEE

Frederick A. Melhado,  
*Chairman*  
 Paul A. Gould  
 Julian H. Robertson, Jr.  
 John N. Irwin III,  
*ex officio*  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*

### NOMINATING COMMITTEE

Eugene R. McGrath,  
*Chairman*  
 Robert Esnard  
 William E. Flaherty  
 Robert Wood Johnson IV  
 Mrs. Gordon B. Pattee  
 Mrs. Leonard N. Stern  
 Andrew H. Tisch  
 Howard Phipps, Jr.,  
*ex officio*  
 Steven E. Sanderson,  
*ex officio*  
 David T. Schiff,  
*ex officio*  
 Ward W. Woods,  
*ex officio*

## City Support

WCS IS GRATEFUL TO THE CITY OF NEW York, which provides significant operating funds through the Department of Cultural Affairs and the Department of Parks and Recreation. We thank Mayor Michael R. Bloomberg, City Council Speaker Gifford Miller, Bronx Borough President Adolfo Carrión, Brooklyn Borough President Marty Markowitz, Queens Borough President Helen Marshall, New York City Councilmember Madeline Provenzano, Councilmember Joel Rivera, Majority Leader, Councilmember José M. Serrano, Chair, Cultural Affairs, Libraries & International Intergroup Relations Committee, Councilmember Margarita Lopez, Councilmember Philip Reed, and the entire New York City Council for their support of capital projects. The elected officials of the City of New York are vital to the public/private partnership on which WCS's service to the people of New York rests.



Opposite: Spring meeting of the WCS Board of Trustees. Above: Blythe's hornbill at Bronx Zoo.



**tierra del fuego.** On September 10, the Goldman Sachs Charitable Fund announced a gift of more than 680,000 acres of land on Chile's Tierra del Fuego to WCS, in an alliance that will ensure conservation in the region in perpetuity (above, Goldman Sachs Advisory Director Lawrence H. Linden, WCS President and CEO Steven E. Sanderson, WCS Senior Vice President, International Conservation, John G. Robinson; left, press conference in Chile). WCS Latin America conservationists Graham Harris and Andres Novaro (below) will help preserve this extraordinary land and its wildlife (below, left, guanacos).







**wcs in india.** In early 2004, two groups of WCS Trustees and Committee members went on safari to India to see where WCS has “wildlife footprints,” talk with our field conservationists, and visit cultural landmarks. Clockwise from top: Samuel H. Wolcott III, Mrs. James M. Large, Jr., and Barbara Hearst tour a WCS field site via elephantback; WCS Conservation Zoologist Ullas Karanth in Nagarahole National Park; WCS Trustee Howard and Mary Phipps, Nora Wolcott, and Sam Wolcott on a game-viewing “drive” in a *coracle* (a traditional round fishing boat) on Nagarahole’s Kabini River; WCS President and CEO Steve Sanderson talks with national park personnel. WCS field research in India dates back to the 1960s, with the first-ever scientific study of wild tigers in central India conducted by Vice President of Science and Exploration George Schaller. Ullas Karanth initiated the current WCS-India program in 1986.









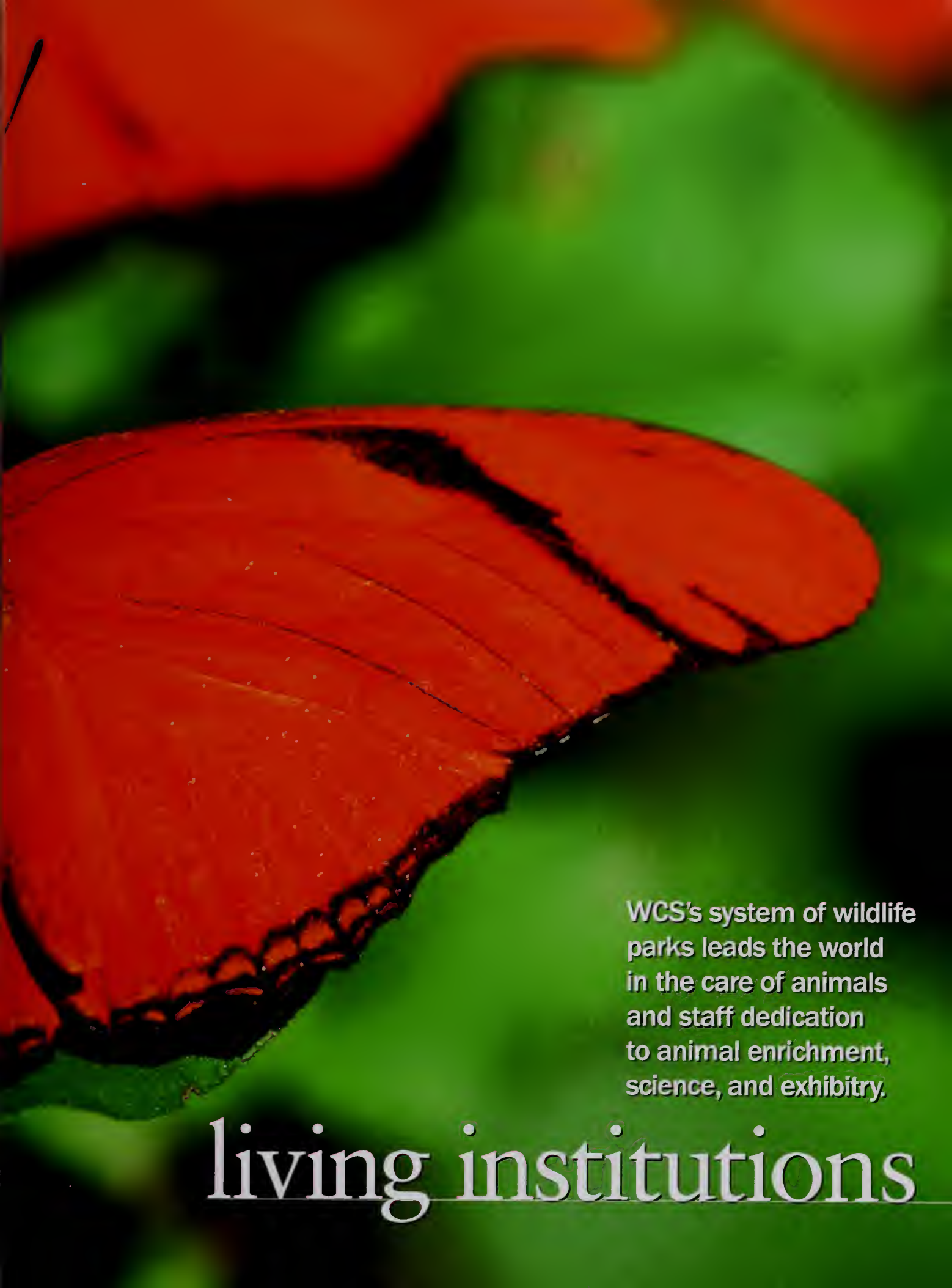
**madagascar.** WCS has been working to protect wildlife and wild places in Madagascar for more than ten years. In 2003, Madagascar President Marc Ravalomanana pledged to triple the size of his country's protected areas. This page, from top: President Ravalomanana (center) with WCS Trustee Edith McBean, WCS Chairman David Schiff, Madagascar's Permanent Representative to the U.N. Zina Andrianarivelo-Razafy; WCS Madagascar conservationists David Meyers (foreground) and Herilala Randriamahazo (in orange); Ambassador Zina Andrianarivelo-Razafy and his wife, Elise; WCS staff at Makira project site. Opposite: In July 2004, WCS President and CEO Steve Sanderson led a trip to Madagascar (top) with WCS Trustees Brian J. Heidtke (bottom, left), Walter C. Sedgwick (bottom, right), and Ward W. Woods (far left).











WCS's system of wildlife  
parks leads the world  
in the care of animals  
and staff dedication  
to animal enrichment,  
science, and exhibitry.

living institutions

THE LIVING INSTITUTIONS OF THE WILDLIFE CONSERVATION SOCIETY PROVIDE AN INCOMPARABLE service to New York City, its residents, and its millions of visitors. Through our four zoos and aquarium, we inform people about the importance of nature and wildlife, inspire people to care about and work for the conservation of wild animals, and set the highest standard for urban wildlife parks in the world.

Maintaining the quality of and creating new visions for exhibits in our wildlife parks require constant attention, and this year was one of the busiest in our long, illustrious history. Design development—in cooperation with animal, construction, horticulture, and other exhibit-essential departments—focused on projects for the next several years as well as the completion of the master plan for our flagship Bronx Zoo. In addition, the Exhibits and Graphic Arts (EGAD) and Operations departments have been working closely on the infrastructure renewal critical to the Bronx Zoo Renaissance. The coming year promises to be a busy one as well, with almost \$56 million in capital construction projects.

The Mitsubishi Riverwalk, a nature trail that winds for a half-mile along the Bronx River, opened on April 15. Located just inside the Bronx Zoo's Bronx Parkway entrance, Riverwalk is open free to the public during the zoo's regular hours. It uses interpretative graphics to introduce visitors to the local wildlife and plants that depend upon the river's health for survival.

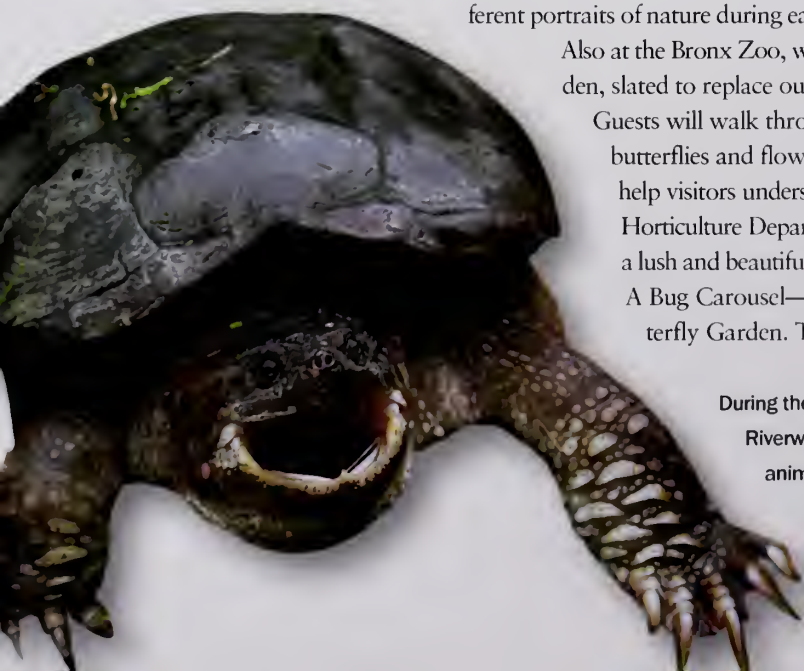
## Mitsubishi Riverwalk introduces visitors to local wildlife and plants that depend upon the river's health.

The exhibit offers tips on how individuals can help make a difference to the river ecosystem. The Charles Hayden Foundation Scenic Overlook offers an inspiring view of the river and helps urban residents feel more connected to the natural world. Michael Klemens, a WCS conservation scientist and expert on local wildlife, and Bronx Zoo Curator of Herpetology John Behler took lead roles as science collaborators for the exhibit, which presents strikingly different portraits of nature during each season of the year.

Also at the Bronx Zoo, we refined the design of a year-round Butterfly Garden, slated to replace our extremely popular but seasonal Butterfly Zone.

Guests will walk through a "secret garden" greenhouse filled with live butterflies and flowering plants. Outdoor interpretive sculptures will help visitors understand the importance of insects in ecosystems. The Horticulture Department ordered materials for fall planting to ensure a lush and beautiful Butterfly Garden for the opening in spring 2005.

A Bug Carousel—the first of its kind—will sit adjacent to the Butterfly Garden. The EGAD, Admissions, and Transportation de-



During the year, our Living Institutions opened Mitsubishi Riverwalk at the Bronx Zoo—featuring native plants and animals, such as the snapping turtle (left)—and planned future wildlife habitats, including a year-round Butterfly Garden (pages 14-15) and an exhibit for African wild dogs (right).









## In Our Own Backyard

THE FEW GREEN SPACES REMAINING within the metropolitan areas along the Atlantic flyway make urban parks crucial oases for birds en route to wintering and summering grounds. This year, the Ornithology Department began collaborating with WCS's North American Program and Metropolitan Conservation Alliance to assess the quality of New York City's parks as migratory bird stopovers. Chad Seewagen and his brother Eric Slayton developed the New York Bird Monitoring Program to determine whether our urban parks are providing the resources birds need during their journeys. As their test location, they set up mist nets along the Bronx River, where it runs through the Bronx Zoo's backyard.

The team carefully removes the birds from the nets, records sex and weight, assesses levels of fat storage, and then bands and releases them. This spring and summer, they counted 275 birds of 33 species (above, a juvenile and adult male Baltimore oriole). Based on their findings, the team will make suggestions as to how urban parks can better provide for Neotropical migrants, to ensure that these busy birds get as much as they can out of their New York minutes.

partments are collaborating with Carousel Works, the largest maker of carousels in the United States, to design and construct the attraction, which will be equipped with giant replicas of real insects upon which guests can sit. The year-round carousel will also open in spring 2005.

In addition, design is under way for an exhibit of African wild dogs at the Bronx Zoo. Initially, the Mammal Department will receive ten captive-born dogs from the DeWildt Cheetah and Wildlife Sanctuary in South Africa. The pack will consist of four males from one litter and six females from another, all about three years of age. Wild dogs are endangered; perhaps 2,000 to 5,000 remain in all of Africa, and WCS currently supports three wild dog conservation projects, in Kenya, Tanzania, and Botswana.

A beautiful day in mid-May 2004 provided a spectacular backdrop for the groundbreaking of the landmark Lion House restoration. Opened in 1903, the building will be restored and transformed into a dual-purpose site, opening in 2006: One side will house an extraordinary new exhibit, *Madagascar!*, and the other will function as a spacious community meeting and event facility. This project received unanimous approval from the New York City Landmarks Commission and is slated to be the first Leadership in Energy and Environmental Design (LEED) certified landmark structure in New York City. LEED Green Building Rating System™ is a voluntary, consensus-based national standard for developing high-performance, sustainable buildings. Members of the U.S. Green Building Council representing all segments of the building industry developed LEED and continue to contribute to its design. Construction of *Madagascar!* is scheduled to begin in fall 2004.

Design continued for expansion and renovation of the WCS Wildlife Health Center. Planning sessions were also held for the Aquarium's new Aquatic Animal Health Center.

Congo Gorilla Forest celebrated its fifth year of thrilling zoo visitors with its unprecedented up-close and personal views of two thriving western lowland gorilla groups. This exhibit, the largest ever undertaken by WCS, remains an award-winning model for success in creating naturalistic habitats, raising conservation awareness, and fostering education—and providing memorable visitor experiences.

Since it opened, there have been eight gorillas born, five of them to first-time moms that had been hand-reared themselves

The Bronx Zoo's landmark Lion House, built and opened in the early 1900s, will soon house a spectacular new wildlife habitat, *Madagascar!* Slated to open in 2006, it will introduce our guests to that island's extraordinary native species, such as lemurs, radiated tortoises, and Nile crocodiles (opposite). In addition, the building is slated to be the first Leadership in Energy and Environmental Design (LEED) certified landmark structure in New York City.



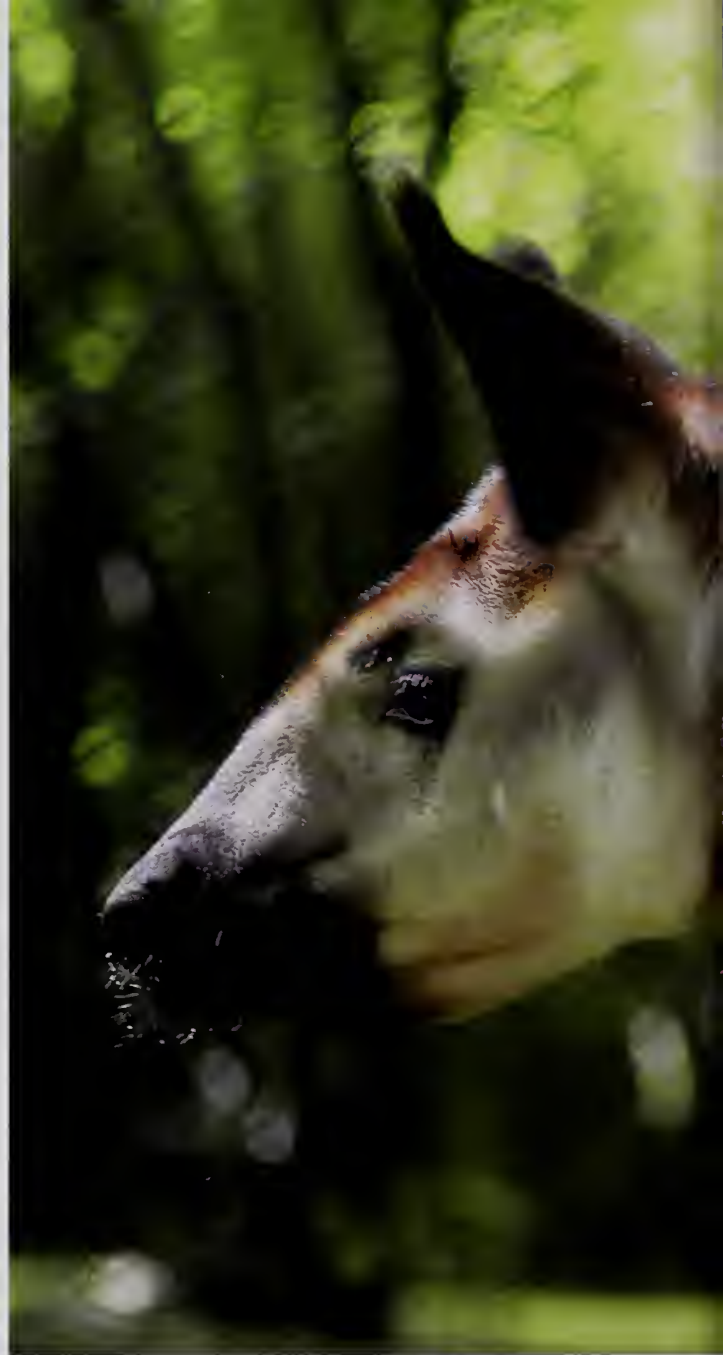




## David Morales

LIVING INSTITUTIONS' STAFF WILL GO TO the ends of the Earth to provide the best for the animals in their care. In 2003, Queens Zoo Wild Animal Keeper David Morales (below) traveled to Ecuador on a grant from the Animal Enrichment Program (see page 28). There he teamed up with WCS conservationist Isaac Goldstein to learn more about the natural habitat of spectacled bears. Morales came home full of ideas about how to enrich the lives of Cisco and Poncho, Queens Zoo's spectacled bear twins. His observations led him to provide Cisco and Poncho with a tree nest for eating, resting, and sleeping, which was fabricated from fire hoses donated by the New York Fire Department.

In 2004, Morales received a second enrichment program grant and spent a week in June with Toni Ruth and other WCS field conservation staff in Yellowstone National Park, learning about the natural history and ecology of cougars. As he did with Cisco and Poncho, Morales plans to take what he learned and create appropriate enrichments for Felix and Cleo, the two 18-month-old Queens Zoo cougars that were orphaned and brought to WCS for protection and care when they were only two months old.



but were subsequently able to rear their own babies in the new exhibit. Six Wolf's guenons and four DeBrazza's monkeys have been born in Congo since 1999. And this year, we welcomed four Red River hog piglets and a female okapi calf. In addition, Curator of Primates Colleen McCann, oversaw the transfer of three of our gorillas to the Louisville Zoo. Among them was Timmy, a 44-year-old silverback, who fathered 13 offspring while he was at the Bronx Zoo. He seems to prefer the company of Louisville's more mature gorillas to that of our rambunctious youngsters.

Tiger Mountain marked its one-year anniversary in mid-May. A splendid gift from Julian and Josie Robertson resulted in formal dedication of the exhibit to the employees, both past

The Bronx Zoo's award-winning exhibit, Congo Gorilla Forest, celebrated its fifth year. Among a number of births in this rain-forest habitat was a female okapi (above). WCS field conservationists study this relative of the giraffe in Central Africa's Ituri Forest.





and present, of Tiger Management Corporation. This exhibit, one of the first initiatives of WCS's Bronx Zoo Renaissance, unifies all aspects of WCS's mission to generate new conservation knowledge, protect species and habitats, and inspire the public to care about wildlife and the natural world. The two habitats at Tiger Mountain—the John Irvin II Tiger Ridge and the C. V. Starr Tiger Valley—have supported a range of enrichment efforts to promote the mental and physical well-being of the extraordinary big cats that call Tiger Mountain home. By the time the exhibit opened, the keeper staff had already accumulated and/or created more than 50 enrichment objects, which were presented to the tigers over the past year.

The Living Institutions' expertise in caring for tigers came into play in a most unusual way last October when Associate General Curator Jim Breheny, Chief Veterinarian Robert Cook, and Clinical Veterinarian Bonnie Raphael responded to a call from the New York Police Department reporting a "pet" tiger in a Harlem apartment. Thanks to the professionalism of

the WCS trio, a full-grown male tiger was safely removed from the inappropriate setting.

WCS is uniquely positioned, not only with leadership roles in both on-site animal husbandry and research at its urban wildlife parks and in-the-field conservation research efforts around the globe, but also in its ability to disseminate valuable information and learning between these arms of our organization. This unparalleled organizational strength is part of what keeps us at the forefront of animal care and conservation. In one example, Nancy Clum, assistant curator of Ornithology, attended a summit meeting in Kathmandu, Nepal, which addressed the alarming decline of vultures in India, Pakistan, and Afghanistan. The meeting included a focus on the deadly effects of diclofenac on the scavenging vultures. Diclofenac is a drug widely administered to livestock in the vulture populations' home ranges. Todd Katzner, a WCS research associate, has collaborated with India's Vulture Rescue team and reported on his vulture monitoring project and the effects of diclofenac on Indi-

an vultures in the February 2004 issue of *Wildlife Conservation* magazine. The Peregrine Fund and Bird Conservation Nepal hosted the summit to brief key government officials from each of the vulture's range countries and to gain their commitment to take action. Clum has been appointed as vice-chair of the AZA Raptor TAG (Taxon Advisory Group) subcommittee dealing with the Asian vulture crisis.

Under a cooperative agreement with the U.S. National Park Service, the Herpetology Department completed amphibian and reptile surveys of ten parks, including Acadia National Park in Maine, Fire Island National Seashore and Sagamore Hill Historic Area in New York, and the Delaware Water Gap National Recreation Area in New Jersey and Pennsylvania. This year, the Assateague Island National Seashore in Maryland was added to the survey list.

Our offsite Wildlife Survival Center (WSC) on St. Cather-



A new exhibit for thick-billed parrots opened at the Queens Zoo in July. Thickbills (above) are the only living parrots whose natural range once extended into the United States. At Central Park Zoo, two female red pandas were born (opposite, one of the cubs and mother Jenny).

ine's Island in Georgia celebrated its thirtieth anniversary this year. In 1974 the center became the first off-site breeding and research facility for any North American zoological organization. This program is dedicated to the breeding management of the ever-increasing numbers of threatened and endangered species from around the globe, and the center continues to share its knowledge with colleagues worldwide. Bai Dang Phong of the Turtle Conservation Center at Cuc Phuong National Park, Vietnam, spent ten days there, and trained in all aspects of chelonian husbandry and veterinary lab skills.

At the New York Aquarium, WCS staff has been working closely with the Portico Group and zoo and aquarium design consultants to create a new vision. The master plan identifies several phases of work to enhance the guest experience and create a state-of-the-art aquarium. A new shark exhibit will be part of the first phase.

Launched this year, a volunteer dive program is moving along swimmingly, with more than 30 active volunteers diving into major exhibit pools to clean them and interact directly with aquarium visitors. The divers are enthusiastically helping to carry out our mission of sustaining wildlife, teaching ecology, and inspiring our guests to care for nature.

In addition, Aquarium Director Paul Boyle and Diana Reiss, senior research scientist in the Osborn Laboratories for Marine Science, have re-named the marine mammal research program as the Center for Studies on the Evolution of Animal Intelligence. The center will act as a magnet to bring together diverse researchers studying cognition and intelligence in marine and terrestrial species.

After particularly difficult budget negotiations in 2002 with the City of New York, it was especially gratifying this year to receive city support in the form of \$14 million to bring big cats to each of our city zoos. The Central Park Zoo will expand its Temperate Zone with what is often described as the most beautiful cat of all—the endangered snow leopard. Native to the high mountain regions of Asia, the snow leopard represents a relatively unique conservation story in that its habitat remains largely intact, but habitat encroachment by humans is becoming ever more pervasive and lethal to this cat. The wild snow leopard population currently stands at about 5,000 animals, and international captive-breeding programs add more than 600 animals to that total.

Prospect Park Zoo will feature the Amur leopard, an AZA Species Survival Plan species that is currently part of WCS's conservation work in the Russian Far East. The exhibit will be located on the wooded portion of the zoo's Discovery Trail, near the walk-through aviary. And a jaguar exhibit at Queens Zoo will be the entry point to the new Central and South American corridor, a natural expansion of the previously all-North American animal focus.

Central Park Zoo received a grant from the prestigious Insti-







## WCS Library

THE WCS LIBRARY ARCHIVES OF scientific journals are bursting at their seams. Thirty-eight years of the journal *Ecology* take up 12 feet of shelf space alone. The other 87 scientific journals we receive occupy nearly 90 percent of the remaining space. Over time, there have been half a dozen reshuffling projects to find the space required to meet WCS staff needs for scientific literature. A crisis loomed: Space, the Final Frontier.

Just in the nick of time, "Ejournal" arrived with a solution to our problem. Since 2000, this digital collection has grown from 12 titles to more than 100 electronically delivered journals, which are available to WCS staff with the click of a few computer keystrokes. Due to ease of access, ejournals have become the favored format for receiving scientific journals at the Bronx Zoo. And the knowledge that they occupy no linear space, cannot "walk" out of the library, or be lost warms the heart of Steve Johnson, manager of Wildlife Information Services (below).

In addition, Steve is building WCS's digital archive collection. For a WCS field researcher heading to the Yukon, for example, the library digitized the entire text of a book published in 1911 by a writer who had visited the same area. Subjects ranging from the founding of the Wichita Bison Reserve to special topics in Bronx Zoo history will all soon be available online.



tute of Museum and Library Services (IMLS) to create its first ever Poet-in-Residence program, with the goal of offering visitors a fully integrated poetry experience. Working with the not-for-profit Poet's House, Zoo Director Dan Wharton spearheaded the project and selected acclaimed poet Sandra Alcosser to identify poems that convey the importance and spirit of conservation. Special graphics treatment will integrate the poems into the overall interpretative experience throughout the zoo.

Scott Silver, Queens Zoo curator of animals, continued his groundbreaking fieldwork monitoring the jaguar population of the Cockscomb Basin Wildlife Sanctuary, the world's first jag-

WCS field veterinarians assist our research projects around the world. In Gabon's Loango National Park, Field Vet Michael Kock has helped Steve Blake's team tranquilize elephants in order to radio-collar them and track their movements in and out of the park (above, a mother with a radio collar and her youngster).





uar reserve, in Belize. In February, Silver led a team of WCS researchers to estimate the number of big cats in the study area. Jaguars are difficult to observe in the wild, but Silver and his team set up camera traps that are triggered by the body heat of animals, a technique pioneered by WCS Conservation Zoologist Ullas Karanth for monitoring tigers in India. Scanning the photographs for coat patterns unique to each jaguar, the team is able to identify individual cats. By monitoring the population over a series of years, the team hopes to learn more about the overall health of Cockscomb's jaguars.

Following the emergence of monkey pox in the United States via the pet trade, WCS Chief Veterinarian Robert Cook testified before the Senate Committee on Environment and Public Works on the threats to public health posed by the unregulated importation of exotic species. Cook's recommendations included international surveillance of wildlife and improved quarantine capabilities. He also met with officials of the Centers for

Disease Control and Prevention in Atlanta to discuss protocols in zoos that ensure the health of people and wildlife. In a new program created by the Government Affairs Department, Cook and Director of our Field Veterinarian program Wiliam Karesh provided a Congressional briefing on the threat of emerging diseases and what WCS veterinary health professionals are doing to assist in surveillance and control worldwide.

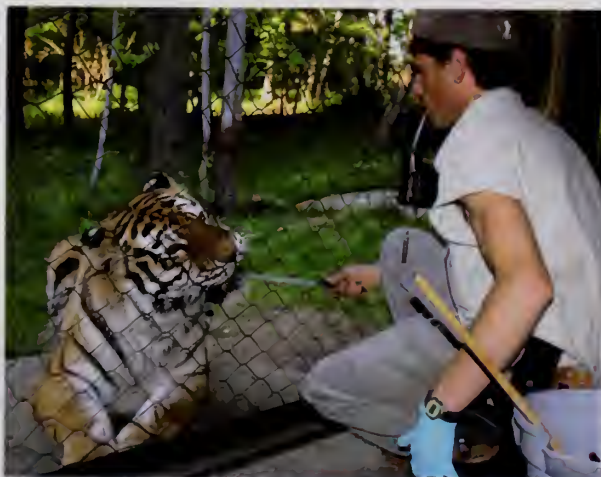
In addition, the Field Veterinary Program launched its newest initiative, Animal Health for the Environment and Development (AHEAD). Created to take a "One World, One Health" approach to disease, the initiative coincided with the media focus on zoonoses, diseases that can cross between animals and humans. At the IUCN's 5th World Parks Congress in South Africa, AHEAD convened more than 60 experts from southern and East Africa to discuss and design conservation and development interventions at the interface between wildlife, domestic animals, and humans.



**the wcs living** institutions continue to develop their innovative Animal Enrichment Program. Thanks to the financial support of Jack and Susan Rudin, a special grants program has been set up to fund research in behavioral enrichment, encourage our wild animal keepers to initiate their own research projects, and give some of them their first opportunity to work in a mentoring capacity.

At the Bronx Zoo's Tiger Mountain, which opened in 2003, animal enrichment is an integral part of the guest experience. Every day our keepers offer the tigers fun items to play with and activities to explore, from food (here, one of our Siberian tigers catches a fish in the exhibit pool) to toys to intriguing scents. Visitors can also watch as our keepers teach the tigers behaviors that better facilitate the care of these big cats (inset, with a treat, Keeper Phillip Reiser draws a tiger close for observation). However, if a tiger decides it would rather enjoy a nap, the keepers may use the enrichment session to answer guests' questions and talk to them one-on-one about behind-the-scenes tiger care.

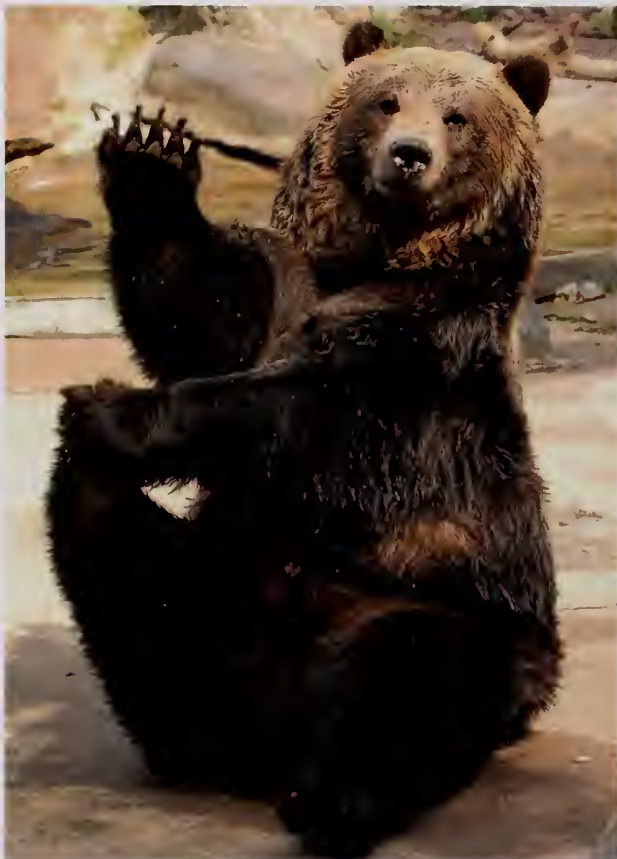
Other highlights of this year's Animal Enrichment Program included staff participation in the Alaska Brown Bear Project, which is a cooperative ecotourism research project between Alaska Fish and Game and the AZA Bear Taxon Advisory group; and travel to international conferences and training workshops.











**animal enrichment** activities vary by species. Above and left, Senior Keeper Jeff Munson trains the Bronx Zoo's brown bears to show their paws for inspections or claw manicures. Below, Hospital Supervisor Lisa Eidlin works with the Central Park Zoo's Vietnamese pot-bellied piglets. Opposite, clockwise from top left: a white-breasted bee-eater snags a cricket; Keeper Joe Abene hand-feeds a crested gecko with a mixture similar to the nectar it would lap from wildflowers; Senior Keeper Joan McCabe-Parodi accustoms giraffe youngster James XII to a restraint device; a polar bear plays with a piece of the Rockefeller Center Christmas tree; Central Park Zoo Curator John Rowden trains a California sea lion.



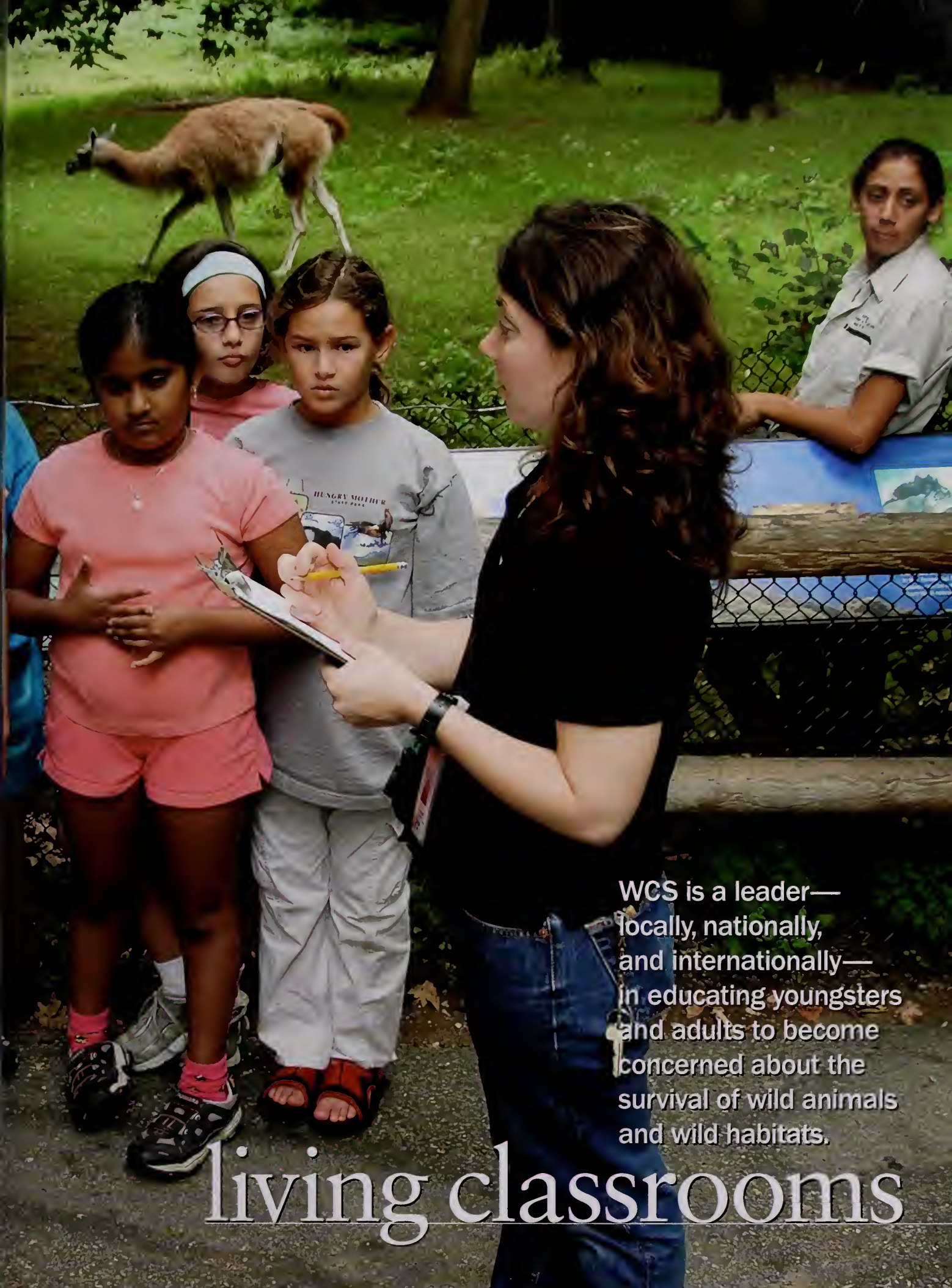












WCS is a leader—  
locally, nationally,  
and internationally—  
in educating youngsters  
and adults to become  
concerned about the  
survival of wild animals  
and wild habitats.

living classrooms



TO CELEBRATE WCS'S SEVENTY-FIFTH YEAR OF AWARD-WINNING ENVIRONMENTAL education programming, WCS President and CEO Steven E. Sanderson declared 2003 the "Year of Education." This honor elevated the visibility of our pioneering conservation education outreach and inspired renewed vigor to enhance our scope in neighborhoods surrounding the Living Institutions and in the rest of the world.

Because teachers and students in our communities form some of our most important audiences, we hosted our first Educator's Open House in April for more than 250 participants from the metropolitan region. The Flaherty Learning Center in Congo Gorilla Forest at the Bronx Zoo served as a base for teachers to experience hands-on activities and to learn about the wealth of WCS education programs. Most of the educators indicated they would bring their classes to explore the natural riches of the zoos and aquarium.

Several of our other programs focused on local natural environments as teaching resources.

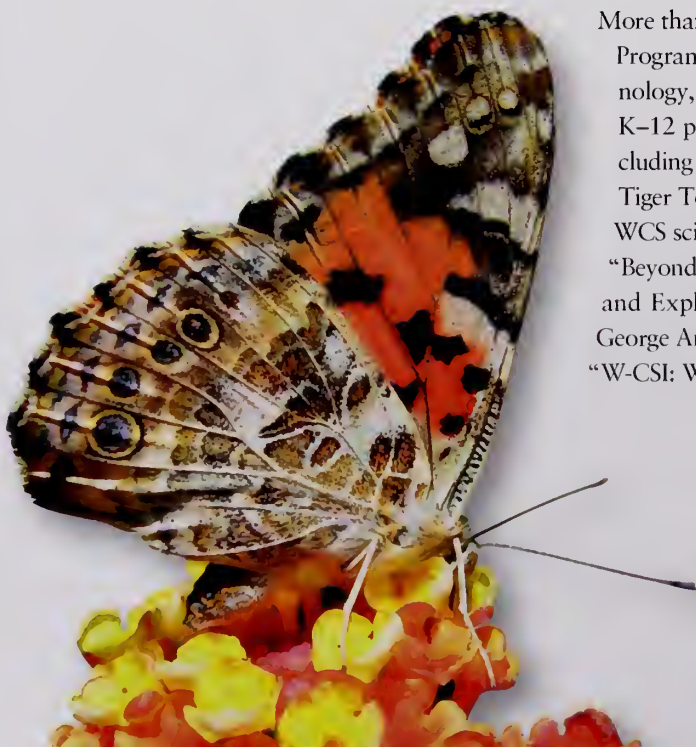
## Several **WCS education programs** focused on local natural environments as **teaching resources**.

The River on the Rise module of our online Wild Explorations high school curriculum uses the Bronx River that flows through the Bronx Zoo as a case study, and the Friends of Wildlife Conservation (FOWC) conducted tours of the brand-new Mitsubishi Riverwalk exhibit. At the New York Aquarium, teams of students from Brooklyn and Yonkers, compared the ecologies of environmentally sensitive areas in Gerritsen Creek, Brooklyn, the Great Swamp in rural upstate New York, and the lower Hudson River.

### **Bronx Zoo Education**

More than 30,000 schoolchildren benefited from the Metro Area Program's alignment with New York State science, math, technology, and literacy standards. Tri-state area students in grades K-12 participated in 36 conservation education programs including Pablo Python Looks at Animals, Windows on Wildlife, Tiger Territory, Primate Behavior, and Wildlife Careers. Several WCS scientists presented their work to our general audiences: In "Beyond the Last Village," Alan Rabinowitz, director of Science and Exploration, discussed his travels in northern Myanmar. George Amato, director of the Science Resource Center, presented "W-CSI: Wildlife Crime Scene Investigations," explaining how the

Some of our most significant education programs are geared toward teenagers and young women (pages 30-31). We use the natural riches of our zoos and aquarium to bring the subject of science to life (opposite, a baby sea lion born at the Bronx Zoo this year; left, a painted lady butterfly).









## Girls for Planet Earth

COLLABORATIVE LEARNING OPPORTUNITIES and an issue that sparks their passion spell success for the Girls for Planet Earth. From increasing the biodiversity of a New York City park to being pro-active about drought in Colorado, and even winning a civic award in Gaithersburg, Maryland, for restoration of a riparian zone, teen girls are making a mark on their communities.

Teams are recruited with the assistance of Girl Scouts USA, National 4-H Council, the Boys and Girls Clubs of America, Girls Inc., and the Children's Aid Society. New skills are applied to combine knowledge, service, and reflection on global environmental issues. Project Coordinator Jeanine Silversmith supports development of the teams' action plans for their community-based projects and sets the stage for the teams' solving local problems in a hands-on fashion. Participants are also being mentored for science careers. Communication is facilitated through the Internet, at the website [www.girlsforplanetearth.com](http://www.girlsforplanetearth.com), where participants conduct their projects online and demonstrate how other young people might undertake similar community service learning projects through Teens for Planet Earth, [www.teensforplanetearth.org](http://www.teensforplanetearth.org).

Young women participating in the program have deemed it "a life-altering event."

field of genetics is used to battle the illegal trade in endangered species. Among the year's successful conservation education programs, the Family Overnight Safari attracted more than 600 adults and children who were treated to engaging learning activities and spent the night camped out in the zoo. Sold-out summer camps served 755 children and capped off a busy year.

In a new partnership with the Children's Hospital at Montefiore in the Bronx, zoo instructors made 12 hospital visits, providing 100 young patients with hands-on activities from our award-winning curricula Habitat Ecology Learning Program and Pablo Python Looks at Animals. Additionally, teacher training staff provided professional development and foundations in science content to the hospital staff and to teens from the hospital's Carl Sagan Explorer Program.

Funded by the National Science Foundation (NSF), and in its second year, the After School Adventures in Wildlife Science program boasts 118 graduates from New York City's five boroughs. Not only does this program foster appreciation for science and science-related careers among students, it also provides them with a safe haven during high-risk after-school hours, and enhances their confidence and self-esteem. Graduates earn biology credit toward their high school diploma.

On April 24 and 25, in honor of National Poetry Month, guests were encouraged to find their inner poets at the second annual Bronx Zoo Poetry Safari. Schoolchildren who participated in the Winning Words Poetry Contest read their award-winning poems selected from hundreds of entries. High-schoolers competed in a spoken-word competition called the poetry slam, and children and adults throughout the zoo used giant magnetic boards to create spontaneous poems about sea lions, giraffes, and elephants. In addition, guest authors read from their works and signed books.

FOWC docents studied interpretive techniques and developed scripts appropriate to the Mitsubishi Riverwalk for adult and family group tours. Focusing attention on the history and reclamation of the river, its ecosystem, and human impact, the volunteers will reach out to the local community and inspire appreciation for the diversity of wildlife in this urban environment. During the year, the FOWC provided 37,329 hours of service.

## New York Aquarium

Meanwhile, aquarium educators took their show on the road. At the National Student Summit on Ocean Issues in Washington, D.C., three teen docents presented their field study results on Brooklyn's Gerritsen Creek and strategies for improved reg-

This year's participants in Girls For Planet Earth, a three-year grant program, were drawn from high schools in ten U.S. states and represented a diversity of backgrounds. The participants gathered for an Earth Summit at the Bronx Zoo and also visited the New York Aquarium for hands-on activities (opposite and left).





ulatory enforcement and community education. Coastal America, NSF, National Geographic, and the U.S. Commission on Ocean Policy sponsored the summit. Curator Merryl Kafka and instructor Bob Cummings presented a biomagnification workshop for the Education Committee of the Alliance of Marine Mammals, in concert with the National Marine Educators' Conference in North Carolina. And at Madison Square Garden's new teachers' fair, Lisa Mielke, assistant curator, conducted staff development workshops for the New York City Department of Education.

On the home front—or in this case, the waterfront—the second year of coastal ecology programs with P.S. 225 in Rockaway held science field trips to the beach and the aquarium for third- and fourth-graders. A new initiative in our docent program focused on environmental research and restoration in Coney Island Creek and other local waters, supported by the National Fish and Wildlife Foundation and the New York City Environmental Fund of the Hudson River Foundation.

A new partnership with the New York Soil and Water Commission resulted in joint teacher-training workshops. Thirty-eight teachers in the Starting Points for Children program in Jersey City requested the first teacher-training sleepover in the aquarium.

The valedictorian of Brooklyn's McKinley Junior High School praised the aquarium for our unique Earth, Sea, and Sky Project. Assemblywoman Adele Cohen sponsored a Family Sea Fair at which more than 900 local children and parents enjoyed an evening of science exploration and activities. And education outreach touched more than 9,000 participants, including Aquaravan visits to Sloan-Kettering Memorial Hospital.

### **Central Park Zoo**

From the zoo to the classroom, Wildlife Theater produces engaging programs highlighting key issues and principles of wildlife conservation. More than 565,000 visitors attended theater productions during the year, including 65,000 children and parents at the Daniel Cowin Acorn Theater in the Tisch Children's Zoo. In addition, the Wildlife Theater launched new educational programs at Queens and Prospect Park Zoos. Together with the successful theatrical adaptation of the popular children's book by the same name, "*Polar Express* at the Bronx Zoo's Holiday Lights," the Wildlife Theater provided informative and entertaining programs to audiences throughout New York City.

WILD Achievements (Wildlife Integrated into Language Development) brought literacy programs to more than 120 classrooms, reaching over 2,200 New York City Head Start children and parents. Its Petunia Penguin Goes to School features a gentoo penguin that transforms children into Antarctic scientists via creative drama, games, and songs. Teacher responses

ranged from "a fantastic vocabulary builder" to "This program is a great motivation piece—I would have a whole theme on penguins for the school literacy fair."

At 130 strong, our Zoo Guides provided 126,000 visitors with more than 16,900 hours of volunteer service.

### **Queens Zoo/Prospect Park Zoo**

Dramatic City budget cuts spurred significant changes and new initiatives to provide wildlife education experiences to zoo visitors, and to increase service to underserved Queens and Brooklyn communities. A new focus on recruiting and training adult docents enhanced at-exhibit interpretations and guided tours for schools and community groups. Participants in a new Teaching Fellows program at each facility created customized docent-led and self-guided tours. Connections were forged through outreach programs for public libraries, YMCAs, Boys' Clubs, the New York City Parks Department, after-school centers, and other community organizations.

### **National Teacher Training Program**

Developed and tested by WCS educators in during 2002–2003, "Elly Jelly Looks at Marine Animals" debuted in many more schools during the year. Workshops provided teachers with fresh ideas about how to incorporate science into language art lessons. They also gave teachers valuable information about Earth's oceans and the opportunities available at their local zoos and aquariums, such as Mystic Aquarium in Connecticut, the Seattle Aquarium, the Florida Aquarium in Tampa, Pittsburgh Zoo and Aquarium, and Brookfield Zoo in Illinois.

WCS National Teacher Education Programs were approved by the New York State Department of Education to provide teachers with professional credit. As a result, enrollment in our summer teacher institutes rose threefold. In new partnerships with local universities, 90 elementary teachers in the master's degree program at Brooklyn College studied habitat ecology with our teacher trainers.

Our leadership role in professional development for zoo, aquarium, and museum educators expanded with Project PRISM (Partnerships in the Revitalization of Instruction in Science through Museums), an extension of our Project TRIPS (Teaching Revitalized through Informal Programs in Science). Funded by a National Leadership Grant from the Institute of Museum and Library Services, PRISM enables educators from the most successful of the TRIPS institutions to serve as mentors for newly selected PRISM institutions. By providing a forum in which informal science institutions can work together to develop high-quality professional development programs, PRISM will greatly increase the capacity of small science institutions throughout the U.S. to help bring about important changes in science classrooms. Project PRISM is intended as a





Informal science institutions, such as the WCS zoos and aquarium, foster an appreciation for nature among young people.

national model for other institutions interested in aligning their education programs with those of the nation's schools.

Teachers from over 15 states across the country as well as Belize received professional development training to incorporate science and conservation into their everyday teaching. Our new Certified Trainer Program enables more teachers to use WCS's award-winning Habitat Ecology Learning Program (HELP). Two Certified Trainers from the Blank Park Zoo in Des Moines, Iowa, have trained 178 teachers and convinced a school district in Des Moines to make HELP part of its seventh-grade curriculum.

### **Girls for Planet Earth**

Also supported by NSF, Girls for Planet Earth brought participants from across the country to the Bronx for an Earth Summit to explore ecology, wildlife biology, and conservation; tour the Bronx Zoo's exhibits and facilities; and participate in workshops with WCS women science professionals who serve as role models. Provided with guidance, support, and resources from WCS, these young women design and implement community-based environmental projects. This year, the projects ranged from improving owl habitat in Central Florida by creating nest boxes from recycled orange juice drums to organizing a conservation exposition in the Washington, D.C. area for more than 50 international, national, and local environmental and community organizations.

### **Distance Learning Expedition**

This year, we expanded the system of remote-controlled cameras in the Bronx Zoo's Aitken Aviary, Wolf's monkey exhibit in Congo Gorilla Forest, and the flamingo exhibit. The new technology enables the distance-learning program to incorporate more live images of animals into video-conferences for K–12 school classrooms across the U.S.

### **International Education**

Following on its success in other parts of Asia, international education staff led summer workshops at Periyar and Kalakad-Munundurai Tiger reserves and the Regional Museum of Natural History in Mysore, India. Ninety-five professionals, including schoolteachers and educators at protected areas, zoos, and museums, were trained in three workshops. The agenda was based on our popular Teachers for Tigers manual, translated into the southern Indian languages of Malayalam, Kannada, and Tamil. Six participants from the previous workshop—our Starr Foundation Fellows—served as teaching interns. Following these workshops, the Starr Foundation Fellows disseminated Teachers for Tigers throughout India, with tiger conservation activities and messages. One of the fellows, Gigi Joseph, conducted four workshops for 120 teachers in the state of Kerala, as well as Wildlife Week celebrations at Periyar Tiger Reserve. He also organized Kids for Tigers and Headmasters for Tigers programs in communities surrounding the reserve.



## A Literacy Link in Queens

"WHIPPETY, WHAPPITY, FWIP, FWAP, WHAM!" says a green tree python (above) in *Verdi*, a book by Jannell Cannon, as he falls to the ground during his frantic attempt to keep from changing colors. While teaching children about camouflage, food webs, and other science concepts, the Queens Zoo is also helping to promote literacy. So the zoo's new outreach programs—in partnership with the Queens Borough Public Library—begins with the reading of books featuring wildlife, such as *Verdi*.

The Queens Borough Public library system serves 2.2 million people, with 63 branches and six adult learning centers. Through this new and rapidly growing partnership, the zoo reached 600 children and 230 adults in 25 library branches during the year. Participants in the children's programs ranged in age from 4 to 15. They engaged in activities such as creating their own All Animal Orchestra, constructing a temperate forest food web, and using biofacts to learn about the physical adaptations of animals. Among the adult programs was the newly developed From Queens to Belize: Tracking the Elusive Jaguar, which features the work of Alan Rabinowitz, director of Science and Exploration and Scott Silver, Queens Zoo animal curator.

In a continuing partnership in Africa with Zambia's only zoo, the Munda Wanga Environmental Park in Lusaka, Tom Naiman, director of Curriculum Development and International Education, worked with park educators to stage their first workshop. This was also the first major event held in the zoo's new education center, completed, in part, through the support of WCS. The 37 participants included schoolteachers, educators at protected areas, staff of environmental NGOs, Munda Wanga's guide staff, as well as two community educators from the WCS International Conservation program run by Dale Lewis in Luangwa Valley and an educator from the WCS Gabon program. In addition, Naiman presented a workshop on the education potential of zoos and natural areas at a conference of the African Zoo and Reserve Educators Network in Lusaka.

Our collaboration in Cuba with the Havana and Louisville (Kentucky) Zoos trained 72 Cuban participants representing 11 of the 14 provinces, plus the special municipality and ecologically rich Isla de la Juventud. Representatives from all but one of that nation's 22 zoos attended. Two workshops were held at the Havana Zoo, and the third, at Santa Clara Zoo in Villa Clara. WCS received feedback that the activities were used at zoos, schools, and in protected areas all over the island. Participants deemed the workshops successful because they increased environmental science knowledge and use of new teaching methods, were practical, used Spanish materials respectful of Cuban customs and culture, and relied on creativity and simple materials, useful for those with few resources.

## Curriculum Development

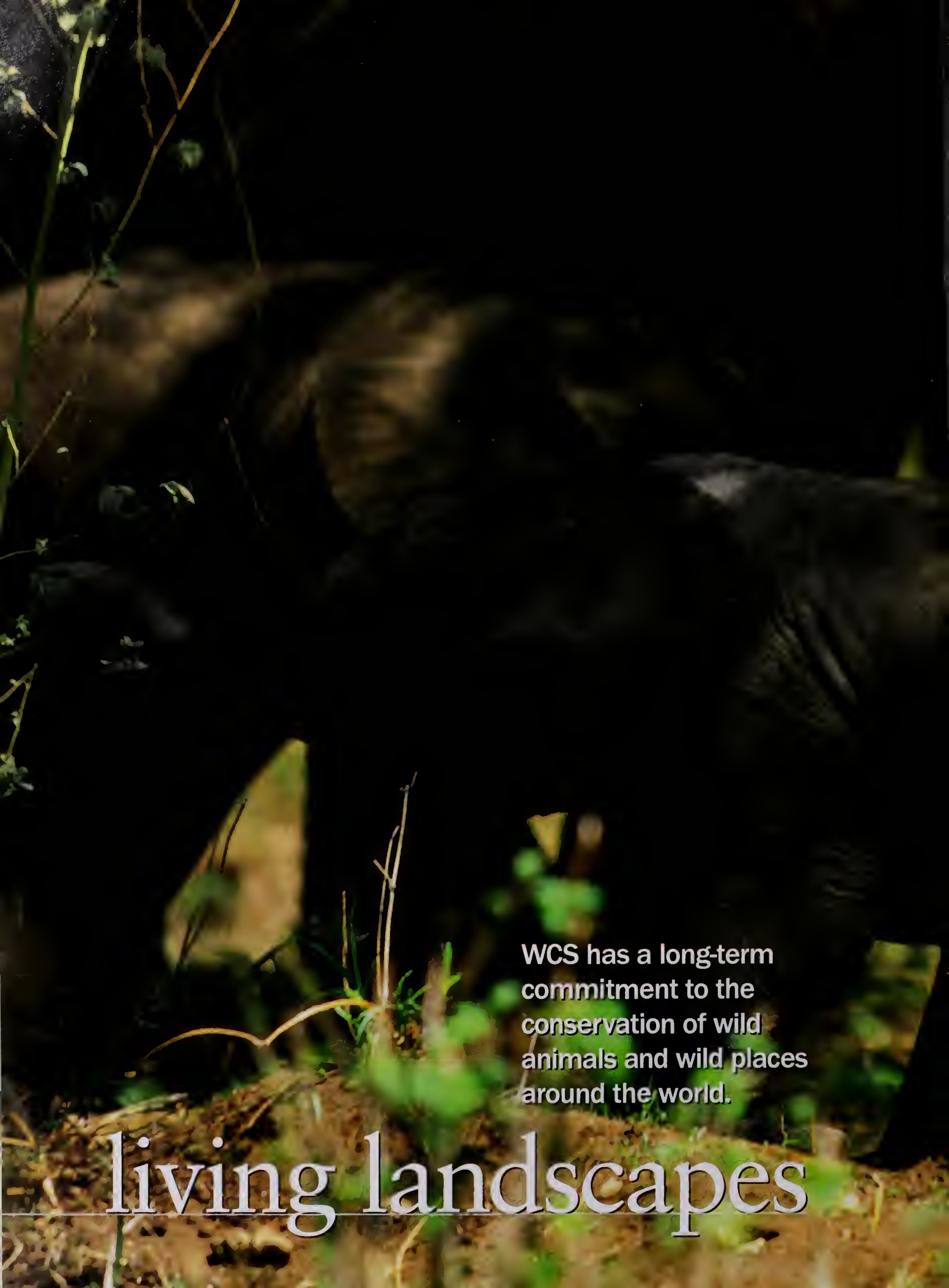
Work continued on Adirondacks: A Living Landscape, the second module in Wild Explorations in Science, WCS's engaging, interactive, online curriculum for high school students. This segment models the process by which WCS scientists choose landscape species to save critical habitats in the large, multi-use Adirondack Park. We began work this year on a third module, River on the Rise, funded by the National Oceanic and Atmospheric Administration, which uses the Bronx River as a case study to examine the science of watersheds, the ecology of rivers, and the conservation of an urban waterway.

Initiated at the request of WCS scientist and jaguar expert Alan Rabinowitz, a new manual—*Jaguars Forever: An Educators Tool Kit for Saving the Americas' Greatest Cat* was launched. Based on the successful *Teachers for Tigers*, it will provide activities on jaguar biology and conservation as well as the role of jaguars in the cultures of the Americas. *Jaguars Forever* will be used by educators in jaguar range countries, and was translated into Spanish.

Congo Gorilla Forest at the Bronx Zoo serves as a base for teachers to learn about WCS education programs, and the Wolf's guenon (opposite) exhibit has been added to the distance-learning program.







WCS has a long-term  
commitment to the  
conservation of wild  
animals and wild places  
around the world.

living landscapes





WILDLIFE CONSERVATION BEGAN WHEN HUMANS RECOGNIZED THAT THEIR ACTIONS could cause the extinction of a species. For most of the history of conservation, advocates focused on making harvesting of wildlife sustainable by developing hunting seasons and reserves to prevent local extinction of game animals. Gradually this idea of conserving wild species for harvesting grew into the conservation of species for their own sake.

Over the past 20 years, however, attention to species' conservation waned as many organizations increasingly shifted their activities to eco-regions, hotspots, and landscapes. This shift was exacerbated by an increasing orientation toward economic development and the needs of local people.

For the Wildlife Conservation Society, the time has come to renew the conservation focus on species. With our twin legacies of field research and living collections, and more than a century of experience, we can put wild species back on the conservation radar screen.

## For the **Wildlife Conservation Society**, the time has come to renew the **focus on species**.

Within WCS's International Conservation division, the Living Landscapes Program continues to work with field scientists to find wildlife-focused strategies for conservation at large scales, in complex environments where interactions with human interests result in conflict. We choose a suite of wild animals, which we call landscape species, whose needs help us determine where we should work, what issues we must resolve, and with whom we should collaborate. These species use large areas, need a variety of habitats, are vulnerable to human activities, help keep the landscape working as it should, have economic or cultural significance for people, and complement other species in the region. Landscape species usually include large, well-known animals, such as elephants, peccaries, and jaguars, but may be less obvious ones that use important habitats—as in the Adirondacks, where the three-toed woodpecker depends on rare boreal forests. Landscape species may represent unique threats—such as the star coral, which is threatened by agricultural chemicals at Glover's Reef atoll in Belize.

In the Southern Hemisphere, WCS has studied the ecology, status, and distribution of the jaguar and its prey for more than 20 years. This long-term research guides our ongoing initiatives, spanning the flooded savannas of Brazil's Pantanal to the tropical forests of Central America, to reduce conflict between jaguars and rural communities and to protect large swaths of jaguar habitat.

WCS researchers in Guatemala's Maya Biosphere Reserve discovered that great numbers of scarlet macaws (right) were being poached in Laguna del Tigre National Park, and that large areas were being burned for cattle ranching. This year, the government allocated \$633,000 to protect Laguna del Tigre, and WCS staff helped authorities capture invaders and poachers.

Left: A forest tree frog in Tanzania, a WCS study site.









## Hukawng Valley Tiger Reserve

IN MARCH, THE GOVERNMENT OF Myanmar declared a sprawling 8,400-square-mile reserve for tigers, making it the largest protected area for these endangered big cats on Earth. Called the Hukawng Valley Tiger Reserve, the Vermont-size protected area resulted from more than five years of collaborative work between WCS and the Myanmar Forest Department. According to Alan Rabinowitz, director of Science and Exploration, who conducted most of the initial research there, the reserve's population of 80 to 100 tigers can grow tenfold, provided protection and management plans are carried out properly. Then this region, which also contains Asian elephants, clouded leopards, and gaur, could help seed other potential tiger habitats that have already lost this species.

Rabinowitz also helped the Myanmar Forest Department draw up management plans for training and education, park infrastructure, and community development. Hukawng Valley Tiger Reserve will be a model of large-scale landscape conservation, where both tigers and humans benefit from careful management of natural resources.

The Hukawng Valley Tiger Reserve is part of Myanmar's Northern Forest Complex, a 12,000-square-mile network of four contiguous protected areas explored and surveyed by WCS and the Myanmar Forest Department between 1996 and 2002.

South America's elusive spectacled bear faces two major threats: habitat loss and poaching. WCS uses field research on spectacled bear ecology and genetics as the basis for several conservation projects across the central and northern Andes. Working with local partners, WCS develops population monitoring programs and conservation activities to guard spectacled bears and their habitat.

From the grasslands and thorn forests of the Chaco to the sparse steppe of Patagonia, WCS protects the guanaco from hunting, competition with domestic livestock, and other threats. WCS conservationists in Bolivia and Argentina use field research and community outreach to promote guanaco management on public and private rangelands.

Habitat loss, poaching, and direct conflict with an ever-growing human population are making it more difficult for many animals to survive in Asia. The tiger and the Asian elephant are two landscape species in this vast continent on which WCS focuses its work. Across the tiger's range—from India to the Russian Far East—WCS monitors its populations and prey, implementing nationwide surveys, strengthening law enforcement, and improving community awareness.

In Sumatra, WCS produced the first reliable population estimates for Asian elephants. Knowing where elephants live and how many exist is paramount for measuring the success of our conservation endeavors and determining priorities for investment in the last-best places for elephants. In Laos as well as in Sumatra, WCS has established pilot projects to help local farmers, communities, and the national government mitigate conflicts between elephants and humans. For both tigers and elephants, we take the lessons learned and reach out not only to the conservation community, but to local, national, and international communities, to ensure the long-term survival of these species and the landscapes in which they live.

In Africa, WCS began studying large carnivores in 1966, protecting lions and other predators in the Serengeti of Tanzania. Today our projects range from the heart of the Central African rain forest to the sparse woodlands of southern Africa and north to the Ethiopian highlands. We aim to ensure the long-term survival of endangered canids such as the Ethiopian wolf and the African wild dog as well as big cats, particularly lions, cheetahs, and leopards.

In the late 1980s it became clear that while a reasonable amount was known about the populations of savanna ele-

Victor, a 385-pound Siberian tiger, roars out of a vehicle into a reserve in the Russian Far East (right). He was rescued in February from a poacher's snare by WCS researchers and Russia's Tiger Response Team. Rather than having his skin and bones sold on the black market, Victor wears a radio collar that allows field scientists to track his movements and habits—data that will help ensure the survival of tigers in Asia.





## The Mannahatta Project

WHAT DID THE AREA THAT IS NOW NEW York City look like before skyscrapers, paved streets, and manicured parks? WCS's Living Landscapes Program is trying to find out through its Mannahatta Project, an innovative research and education program to reconstruct the block-by-block geography of the Manhattan landscape during Henry Hudson's time and compare it to today's cityscape. Manhattan was once remarkably diverse, with more than 45 ecological communities and wildlife including elk, black bears, wolves, and mountain lions, as well as the Lenni Lenape people, who lived in the region for thousands of years before European colonization. Through analysis of historical maps and documents, detailed natural history, and cutting-edge landscape ecology studies (below, Eric Sanderson, associate director of landscape ecology and geographic analysis, in Central Park), we will bring to New Yorkers a sense of their own wild place and the importance of wildness and wildlife for all.



phants in eastern and southern Africa, virtually nothing was known about forest elephants of Central Africa. WCS, therefore, focused its main efforts on this species. We support elephant research and conservation in seven African countries, and have been asked by CITES (Convention on International Trade in Endangered Species of Flora and Fauna) to establish a monitoring system for forest elephants to measure the impact of the ivory trade. WCS also concentrates on solving the problem of elephants destroying farmers' crops. Solutions are being applied throughout the range of elephants in Africa and Asia.

From large mammals to migratory birds to snakes (above, a boomslang in Tanzania), WCS works to protect a host of wild species in a great variety of landscapes around the world.





WCS has been working for a long time to conserve great apes around the world. Currently, we are in eight countries, studying gorillas (mountain, eastern and western lowland, and Cross River), chimpanzees (common and bonobos), and orangutans. In Africa, we work with all four gorilla subspecies and both chimp species, supporting activities that cover the spectrum from habitat and population surveys, to human-ape health issues (including research into the origins and spread of deadly Ebola hemorrhagic fever), to genetics and behavioral ecology, to protected area management, to the reduction of threats posed by bushmeat consumption.

In the Northern Hemisphere, we are conserving birds potentially threatened by energy development in the Arctic and vulnerable to poor forestry practices in western states, as well

as red knots endangered by human over-harvest of their food sources along the eastern seaboard.

In Greater Yellowstone, we work to understand the habitat needs and ecological interrelationships of wolverines, cougars, grizzly bears, and wolves, and endeavor to diminish the conflicts between humans and black bears. Additionally, we are defining areas for large carnivores, woodland caribou, and other species in regions of Canada that will be opened to human use in the near future. In the Rockies, we strive to maintain landscape connectivity for carnivores and to conserve key pronghorn antelope migration routes.

Elsewhere, we seek to address the needs of an important suite of smaller species ranging from bats and amphibians to turtles and snakes, which face a variety of human threats.



Herilala Randriamahazo, director of the Marine and Coastal Program for WCS Madagascar, stands on the beach at Tampolo Marine Park, one of three marine reserves in Madagascar's Masoala National Park designed to protect Masoala peninsula's coral reef systems.

## Africa

### **BOTSWANA**

Scent marking in African wild dogs: Understanding habitat management and conservation. M. Parker

### **CAMEROON**

Biological monitoring of the Banyang-Mbo Forest Reserve. D. Hoyle, M. Nambu  
Conservation and community participation in Banyang-Mbo Wildlife Sanctuary. D. Hoyle, D. Ngwese, L. Nkenbi  
Survey and priority setting in the Cameroon/Nigeria highlands. D. Hoyle, R. Fotso, J. Oates, M. Enow  
Status and conservation of Cross

River gorillas in the Cameroon Highlands. J. Groves, J. Oates  
Management of Mbam-Djerem National Park. R. Fotso  
Large mammal surveys and bushmeat studies around Mbam-Djerem National Park. R. Fotso  
CAMRAH: Support of law enforcement of bushmeat transport on the railway. R. Fotso

### **CENTRAL AFRICAN REPUBLIC**

Dzanga forest elephant demographics and social dynamics. A. Turkalo, P. Walsh  
Research on the use of elephant infrasound as a method of censusing in forests (Cornell University). K. Payne, A. Turkalo

Forest elephant population analysis. P. Walsh  
Nutritional analysis and feeding ecology of wild and captive lowland gorillas. M. Remis, E. Dierenfeld

### **CONGO REPUBLIC**

Nouabalé-Ndoki Project, Nouabalé-Ndoki National Park (NNNP). D. Bourges, M. Gately, D. DosSantos, J. Mokoko, M. Apesse  
Large mammal distribution and relative abundance between NNNP and the village of Bomassa-Bon Coin. F. Maisels, M. Mamadou, D. Ekoutouha, M. Mboulafini, M. Hockemba

Aerial videography as a tool for elephant monitoring and protection. F. Maisels, S. Blake, E. Stokes, S. Elkan, E. Sanderson  
Forest elephant movements and ecology using telemetry. S. Blake, F. Maisels, W. Karesh  
Forest elephant and large mammal distribution and abundance in relation to human activities. F. Maisels, P. Boudjan, S. Blake  
Forest elephant genetics. S. Wasser, S. Blake, F. Maisels, C. Inkamba-Nkulu, P. Boudjan, J. Onononga, D. Morgan  
Long-term phenological and nutritional studies of elephant and ape foods. S. Blake, F. Maisels, E. Dierenfeld, E. Stokes,





Dwarf crocodile ecology and bushmeat surveys. J. Thorbjarnarson, S. Blake, M. Eaton

Mbeli bai gorilla social dynamics, ecology, and genetics. T. Breuer, E. Stokes, A. Tsama, B. Bradley

Mbeli bai gorilla ontogeny. A. Nowell

Ecology and social behavior of chimpanzees of the Goualogo Triangle, NNNP. D. Morgan, C. Sanz, J. Onononga

Chimpanzee genetics study. Goualogo. D. Morgan, C. Sanz, B. Bradley

Before-and-after impacts of logging: Focal study on chimpanzees and gorillas, Goualogo. D. Morgan, C. Sanz, S. Strindberg, R. Malonga

Conservation of Konkouati-Douli National Park. B. Baert, G. Bonassidi, J. Onononga, A. Bitsindou

Conservation and biological surveys of Lac Télé Community Reserve. C. Schloeder, M. Jacobs, S. Strindberg

Training of national biologists in ecological methods, the scientific approach, and GIS. C. Schloeder, M. Jacobs, E. Stokes

School education program and environmental curriculum development. S. Elkan, M. Gately, E. Stokes

#### DEMOCRATIC REPUBLIC OF CONGO

Elephant and large mammal monitoring in the Okapi Faunal Reserve. J. Hart, P. Tshikaya

Intake and Digestion trials with Okapi in the Ituri Forest. J. Hart, E. Dierenfeld

Okapi Faunal Reserve and community management zoning project. T. Hart, R. Tshombe, R. Mwinyihali

Ituri Forest Research and Training Center (CEFRECOCF). T. Hart, J. Hart, I. Liengola

Botanical exploration of the Okapi Faunal Reserve. T. Hart, C. Ewango

Gorilla monitoring in Kahuzi Biega National Park. J. Hart, H. Kayeye, J. Kahekwa

Large mammal surveys and support to management in Kahuzi Biega National Park. J. Hart

Support of the re-establishment of Kahuzi Biega National Park infrastructure. J. Hart, S. Whataut

Exploration of the lowland sector and habitat mapping of Kahuzi

Biega National Park. J. Hart, M. Mbachu, I. Liengola, J. Muhigwa

Coordinating a collaborative biological monitoring program in five World Heritage Sites, in conjunction with MIKE program (Monitoring the Illegal Killing of Elephants). O. Ilambu, J. Hart

Itombwe Forest, advising and follow-up on a community conservation project developed by national NGO. J. Hart

Kinshasa, collaborators in developing a national conservation database, support systems to ICCN, and establishment of a national office. T. Hart, J. Hart, E. Bashige, O. Ilambu

#### ETHIOPIA

Ethiopian wolf conservation and non-governmental organization capacity-building. S. Williams, A. Shimelis, E. Beyene

Ethiopia elephant: Law enforcement monitoring. Y. Demeke

#### GABON

Forest history and dynamics and their implications for management in Lopé Forest Reserve. L. White, R. Oslisly, A. Batsiellili

Leopard surveys and ecology in Lopé Reserve. P. Henschel, J. Ray

Research and training for management of Lopé Reserve and development of visitor center. K. Abernethy, T. Ukizintambara, L. White, E. Chehosky

Mandrill ecology and ranging patterns. K. Abernethy, W. Karesh

Ecology and social organization of elephants in central Gabon. L. Momont, S. Blake

Use of plant genetics to map forest refuges. N. Muloko Ntountoume

Sea turtle research, conservation, and support to national NGOs. G. P. Sounguet, C. Mbina, R. Parnell

Bushmeat survey and management. K. Abernethy, E. Effa, D. Wilkie, M. Starkey

Management, research and ecotourism in Iguela, coastal Gabon. M. Fay, A. Downer

Gorilla research at Langoué bai. S. Latour

Establishment of national park management infrastructure with the Gabonese government. M. Fay, L. White, N. Orbell

Cetacean research and humpback whale conservation in coastal Gabon. H. Rosenbaum, S. Ngouessono, G. Sounguet

Support to government for establishment of a protected areas network: 13 new national parks. L. White, M. Fay

Crocodile ecology and the bushmeat trade. J. Thorbjarnarson, M. Eaton

Protection of Langoue Bai from logging: Establishment of a new national park. M. Fay, L. White, N. Orbell

#### GHANA

Population status of colobus in forest fragment surrounding the Boabeng-Fiema Monkey Sanctuary. S. Wong

#### IVORY COAST

West African manatee conservation and awareness education program. A. Kouadio

#### KENYA

African Conservation Centre (ACC): Development of a national NGO. J. Ndungu, ACC Staff

Wildlife distribution and habitat use in the Kitengela corridor: Nairobi National Park, and the Athi-Kapiti plains. ACC Staff, H. Gichohi

Habitat rehabilitation of Amboseli wetlands. ACC Staff

Ecological monitoring in Amboseli National Park. D. Western

Laikipia Predator Project: Conservation of large carnivores in livestock areas. L. Frank

Conservation of African wild dogs in the Samburu-Laikipia area. R. Woodroffe

Effects of land-use on a bird community of a papyrus swamp in western Kenya. A. Owino

#### MADAGASCAR

Management and Conservation of Masoala National Park. James MacKinnon, H. Crowley, L. Andriamampianina

Protection of Makira Forests through the creation of a new Conservation Site. Helen Crowley, L. Andriamampianina, D. Meyers

Freshwater fish in-situ and ex-situ conservation. P. Loiselle

Conservation of the radiated tortoise and spider tortoise and its habitat in southern Madagascar. H. Randriamahazo, J. Behler

Development of a nationwide biodiversity database. M. Rakotondratsima

Community-based natural resource management and creation of a new protected area in Sahamalaza. L.

D. Morgan, C. Sanz, A. Tsama, L. Bodjo

Bongo ecology and use of forest clearings. P. Elkan, W. Karesh

Ecology of "bais" and their importance for wildlife. S. Elkan

Nouabalé-Ndoki peripheral zone management. P. Elkan, P. Auzel, C. Prevost, M. Ngongue, S. Elkan

Biological surveys and monitoring in Nouabalé-Ndoki peripheral zone and greater landscape. P. Elkan, S. Elkan, S. Strindberg, R. Malonga, A. Moukassa

Bushmeat offtake monitoring in logging concessions in the buffer zone of NNNP. P. Elkan, S. Elkan, A. Moukassa, M. Eaton, R. Malonga

Bushmeat offtake and human demographic monitoring in Bomassa-Bon Coin, NNNP. F. Maisels, D. Ekoutouba, D. Bourges

# wcs field projects



## WCS Partners with Gabon



AVENTURES SANS FRONTIERS (ASF) is a Gabonese NGO (non-governmental organization) created in 1992 by two adventurous students who set out to learn more about

the biological riches of their country (top, common dolphins). During a kayak expedition down Gabon's Atlantic coast, Guy-Philippe Sounguet and Christian Mbina noted a high nesting density of leatherback turtles and, with characteristic pragmatism, decided to learn more about these animals and protect their nesting beaches. With WCS assistance, ASF now has camps and personnel (above, team member with turtle hatchling) at three coastal sites and has amassed five years of data on nesting densities and nest-site fidelity. Human presence on these vital beaches is a strong deterrent to egg collectors, and programs such as village outreach and school visits have done much to alter the conservation landscape for the leatherback in Gabon.

To achieve technical and financial independence, WCS and ASF have launched a capacity-building program with the support of the Wilson Challenge Grant. This program provides expert training and logistical support so that ASF is able to secure significant international support grants to reinforce and expand its conservation activities.

Andriamampianina, N.  
Ramasinoro

Mammal Research Program:  
Population surveys and  
monitoring programs of diurnal  
lemurs at Masoala National Park  
and Sahamalaza forests. M.  
Rakotondratsima, V.  
Andrianjakarivelo

Capacity-building and training  
program; education and training  
modules for conservation biology  
for university and government  
institutions. H. Crowley, T.  
Rahagalala

Support to the Government:  
Planning and implementation of  
national priorities for  
conservation of wetlands,  
marine and forest habitats.  
H. Crowley, L.  
Andriamampianina, H.  
Randriamahzo, D. Meyers,  
A. Cooke

Support to the Madagascar  
National Parks Service: Business  
plans for parks, ecological  
monitoring and sustainable  
finance mechanisms. J.  
MacKinnon, H. Crowley, R.  
Victurine

Promotion of ecotourism in  
Masoala and Andohahelo  
National Parks. H. Crowley, L.  
Andriamampianina, J.  
MacKinnon

### MALAWI

Mt. Mulanje biodiversity and  
monitoring. J. Bayliss

### MALI

Spatial assessment of chimpanzee  
population and habitat in the  
Bafing protected areas. C. Duvall

### NAMIBIA

Ecology, conservation and  
community-based management of  
desert-adapted elephant and  
giraffe in northwest. K. Leggett, J.  
Fennessey

### NIGERIA

Status of gorillas, other primates and  
forests in eastern Nigeria. J. Oates

### RWANDA

Nyungwe forest conservation:  
Ecotourism, education, inventory  
and monitoring. M. Masozera, I.  
Munanura, F. Mulindahab, A.  
Plumptre, M. Sindikubwabo, B.  
Kaplin

Feeding ecology and ranging of  
chimpanzees at high altitudes. M.  
Masozera

Ranging behavior of a group of 400  
colobus monkeys. F.

Mulindahabi, M. Masozera,  
A. Plumptre, P. Fashing  
Virungas park guard support. A.  
Plumptre

Census of the chimpanzee  
population in Nyungwe National  
Park. B. Kaplin, N. Blondel, F.  
Mulindahabi

Restoring biodiversity conservation  
capacity in the mountain forest  
protected areas. M. Masozera,  
B. Weber



Study of crop-raiding patterns around the Parc National des Volcans. A. Plumptre

#### **TANZANIA**

Southern Highlands Conservation Program. T. Davenport  
Carnivores of the Rift. D. DeLuca, N. Mpunga

Tanzanian Cheetah Conservation Program: A survey of the distribution and status of cheetahs, ecotourism. S. Durant, S. Bashir, J. Shemkunde, T. Maddox, D. Gottelli

Status of critically endangered dugongs. D. DeLuca, T. Davenport

The effect of poaching on elephant social systems and human/wildlife impact outside park boundaries, Tarangire. C. Foley, L. Foley, S. Sikombe

Biodiversity assessment and the development of professional capacity in Tanzanian National Parks Ecology Department. D. Moyer

Conservation ecology and demography of the highly endangered Sanje mangabey of the Udzungwa Mountains. C. Ehardt

Behavioral flexibility and reproductive output across floristic and disturbance gradients in an endangered primate. K. Nowak

Rungwa-Ruaha Landscape Program. P. Coppolillo

Zanzibar coastal forest conservation. K. Siex

#### **UGANDA**

Development of the Institute of Tropical Forest Conservation in Bwindi Impenetrable National Park. A. McNeillage

Biological survey of the Bwindi Impenetrable National Park. A. McNeillage, A. Plumptre, W. Olupot

Census and conservation of the gorilla population in Bwindi Impenetrable National Park. A. McNeillage

Study of edge effects in the conservation of fauna and flora in Bwindi Impenetrable National Park. W. Olupot

Ecological nutrition of mountain gorillas in Bwindi Impenetrable National Park. J. Rothman, E. Dierenfeld, A. McNeillage

Impacts of tourism on gorilla behavior. A. McNeillage, F. Muyambi

Biodiversity: Ecological processes, evolutionary mechanisms, and

capacity-building. C. Chapman, L. Chapman

Primate dispersal and conservation in Kibale Forest. W. Olupot

Nationwide survey of chimpanzees in Uganda. A. Plumptre, D. Cox

Socioeconomic survey of communities living around Bwindi Impenetrable National Park, Virunga Volcanoes, and Nyungwe National Park. A. Plumptre, I. Munanura, A. Kayitare, H. Rayner

Evaluation of community-based conservation initiatives: Management of protected areas. A. Mugisha

Developing strategies to address human-wildlife conflict in collaboration with CARE. A. McNeillage

Assessing the effectiveness of Integrated Conservation and Development strategies in Bwindi Impenetrable and Mgahinga National Parks. A. McNeillage, A. Namara

Building the capacity of Uganda Wildlife Authority in monitoring, research and adaptive management. A. Plumptre

Transboundary collaboration for protected areas between Uganda Wildlife Authority and Institut Congolais pour la Conservation de la Nature in Democratic Republic of Congo. A. Plumptre, I. Owunji, D. Kujirakwinja

Human/wildlife interactions. A. McNeillage, L. Osborne

Economic valuation of forest types. G. Bush, A. Plumptre

Promoting large mammal conservation through Nature Uganda. I. Owunji, A. Plumptre

Conservation of chimpanzees. A. Plumptre

Nutritional ecology of chimpanzees, Kibale National Park. A. Pokempner

Biological surveys of the Albertine Rift forests to establish zoning plans for the forests. A. Plumptre, I. Owunji, D. Nkuutu

#### **ZAMBIA**

Improving natural resources management and sustainable agriculture in the Kafue area, CONASA. D. Lewis, G. Kawech, S. Matambo, WCS Zambia Staff

Comprehensive monitoring systems for community based wildlife conservation in Africa: Determinants of data quality. A. Lyons

Community markets for conservation and rural livelihoods



## **Andrew Plumptre**

ANDY PLUMPTRE HEADS WCS'S ALBERTINE RIFT Program, a series of projects that focus on the western rift valley in Africa. This region contains more mammals and birds than any other in Africa, and is one of the world's key areas for conservation activities. Born in Uganda, Andy has lived there nearly half his life. With the start of Idi Amin's reign of terror, his parents moved the family to Britain, where Andy attended school. He went back to the Albertine Rift in 1984 to explore Rwanda, Burundi, and eastern Congo, and at that time decided that he would return some day to work with the mountain gorillas. Three years later he started his doctoral fieldwork focusing on the ecology of elephants, buffaloes, and antelopes in the mountains where the gorillas occur. Much was already known about gorillas, but there was a need to better understand the forest ecology if the gorillas were to be managed effectively. To date, Andy's study is one of very few in the Virunga Volcanoes that have not focused on gorilla behavior. After receiving his PhD from Bristol University and studying the impacts of selective logging on wildlife for six years, he joined WCS as assistant director for Africa in 1997. The pull of African fieldwork prevailed, however, and in late 2000, Andy established the Albertine Rift Program to help rebuild wildlife numbers to their former levels and restore the wildlife spectacles that existed there not long ago.

# wcs field projects



Tony Lynam, Asia regional advisor for Training and Capacity Development, with Myanmar Forest Department staff who are trained members of the joint WCS/Forest Department tiger teams at Hukawng Valley Wildlife Sanctuary, the largest protected area for tigers on Earth.

(COMACO). D. Lewis, WCS Zambia Staff  
Database management for a multi-sector approach to wildlife conservation. D. Lewis, WCS Zambia Staff  
Conservation through "Food-for-better-farming" initiative. D. Lewis, WCS Zambia Staff  
Poacher/ hunter-to-farmer transformation program. D. Lewis, WCS Zambia Staff  
"Bridges of Support" program for improving conservation synergies with safari hunting. D. Lewis, WCS Zambia Staff  
Community expeditions in African culture and wilderness—living ecotourism. D. Lewis, WCS Zambia Staff  
Nyamaluma college community-based training and land-use planning/ African College for CBNRM. D. Lewis, WCS Zambia Staff

## ZIMBABWE

Ecology and deterrence of crop-raiding elephants. F. Osborn, G. Parker  
Planning of an elephant migration corridor in the Guruve/ Muzarabani district. G. Parker, F. Osborn

## REGIONAL

Census of the mountain gorillas of the Virunga volcanoes (Rwanda,

Uganda, DR Congo). A. McNeillage, M. Gray, K. Fawcett, M. Robbins, A. Plumptre  
Central African forestry practices. P. Elkan, J. Hall  
Forest buffalo survey and conservation in Gabon and Congo. L. Molloy, W. Karesh  
Ecological nutrition of echo parakeets in Mauritius. M. Wrobel, E. Dierenfeld  
Satellite image analysis of the Albertine Rift to assess forest change since the mid-1980s. A. Plumptre, N. Laporte  
Vertebrate ranging and tree dynamics in Congo forests. P. Walsh  
Development of elephant monitoring system in the Congo Basin for CITES, MIKE Program (Monitoring the Illegal Killing of Elephants). S. Blake, J. Hart, R. Beyers  
Ex-situ collaboration priority-setting exercise. M. Wrobel  
Priority setting for African carnivores. J. Ray  
African reptile and amphibian conservation and bushmeat. J. Thorbjarnarson, M. Eaton  
Megatransect biodiversity survey (2001-2002): Central African Republic to Gabon; data analysis. M. Fay  
Human footprint on Africa. M. Fay, E. Sanderson  
Central African Regional Program for the Environment (USAID/CARPE).

J. Deutsch, J. Hall  
Regional training and inventory program in Central African forests. L. White, P. Walsh  
Trinational park monitoring: Congo, CAR, Cameroon (WCS/WWF/USAID). M. Gately, F. Maisels, E. Stokes, B. Curran, P. Elkan  
Development of efficient methods for large mammal surveys. P. Walsh, L. White  
WCS Africa small grants program for African nationals and Beinecke student scholarship support. G. Patterson, M.L. Penn, T. Parkinson

## Asia

### BHUTAN

Exploratory surveys. G. Schaller

### CAMBODIA

Conservation and landscape management in the northern plains. T. Setha, Kong Kim Sreng, T. Clements, J. Walston  
Southern Mondulkiri forest biodiversity conservation project. M. Soriyun, J. Walston, E. Delattre  
Conservation of large waterbirds in the core areas of the Tonle Sap Biosphere Reserve. S. Visal, L. Kheng, F. Goes  
Ecology and conservation of wet grasslands and birds around the Tonle Sap. H. Chamman, P. Davidson

Conservation of the estuarine terrapin, *Batagur baska*, at Sre Ambel. H. Sovannara  
Mekong dolphin conservation project. P. Somany, I. Beasley  
Status and conservation of the Siamese crocodile and river terrapins. J. Thorbjarnarson, H. Sovannara, C. Poole

## CHINA

Monitoring tiger populations in Heilongjian and Jilin Provinces. E. Zhang, D. Miquelle, E. Li  
Asia Conservation Communication Program. E. Zhang, E. Li, T. Krizek  
Monitoring trade and use patterns of wildlife in Shanghai. E. Zhang, CITES Shanghai Office  
Conservation of the Chinese alligator. J. Thorbjarnarson, W. Xiaoming  
Conservation of the giant softshell turtle. J. Thorbjarnarson, W. Xiaoming

## DPR KOREA

Conservation of biodiversity at Mt. Myohyang National Park. W. Duckworth

## INDIA

All India tiger surveys. U. Karanth, S. Kumar, J. Nichols  
Community leadership for tiger conservation, Karnataka. U. Karanth, S. Gubbi, P. Bhargav, K.M. Chinnappa, D.V. Girish, N. Jain, Balachandra  
Ecology of the tiger in Panna, Central India. R. Chundawat, U. Karanth, S. Kumar  
Tiger-prey surveys in Maharashtra. U. Karanth, S. Kumar, H. Dhanwatey, P. Dhanwatey  
Survey of the human impacts on large mammals at Bandipur. M. Madhusudan  
Hornbill ecology and conservation in Arunachal Pradesh. A. Datta  
Wildlife First Outreach Project. U. Karanth, S. Gubbi, P. Bhargav, K.M. Chinnappa  
Living landscape consolidation project at Kudremukh, Western Ghats. U. Karanth, P. Bhargav, N. Jain, D.V. Girish  
Survey for endangered mammals in Changland District, Eastern Arunachal Pradesh. A. Datta

## INDONESIA

CANOPI (Conservation Action and Network Program, Indonesia) in the Bukit Barisan Selatan Landscape. R. Lee, H. Wibisono, M. Saleh, E. Purwanto



- Elephant ecology and resolution of human-elephant conflicts in southern Sumatra. A. Gorog, M. Tyson, S. Hedges, A. Sitompul, D. Gunaryadi
- Factors affecting frugivore abundance and distribution in Sumatra. A. Gorog, M. Nusulawo, N. Winarni
- Conservation Training and Resource Center. R. Lee, N. Brickle, N. Andayani, M. Saleh, E. Manasea
- Wildlife Crimes Units in Sumatra and Sulawesi. R. Lee, H. Wibisono, S. Siwu, N. Alexander, D. Nugroho
- Island-wide biodiversity surveys in Sulawesi. R. Lee, A. Gorog, A. Dwihyahreni, I. Honowu
- Feeding ecology of fruit bats in Bogani Nani Wartabone National Park, North Sulawesi. M. Christy, S. Lentey
- Protected areas management in North Sulawesi. I. Hunowu, Y. Hunowu, J. Mole, F. Talangamin, M. Wangko
- Geographic Information Systems (GIS) assessment and training. D. Gaveau, A. Aslan
- IRAN**
- Conservation of the Asiatic cheetah, its natural habitat, and associated biota. G. Schaller, T. O'Brien, E. Sanderson, P. Zahler
- Survey of Asiatic cheetah and its prey. G. Schaller, T. O'Brien
- KAZAKHSTAN**
- Ecology and conservation of a unique community of endangered eagles at the Naurzum Zapovednik. T. Katzner, E. Bragin
- Status and conservation of vultures in southeastern Kazakhstan. T. Katzner, S. Sklyarenko
- LAO PDR**
- Nam Ha National Protected Area Strengthening Project. M. Hedemark, A. Johnson, S. Vannalath, T. Hansel, P. Thamlasin
- Bolikhamxay ecosystem and wildlife conservation project. M. Hedemark, A. Johnson
- University biodiversity conservation curriculum (WCS, AMNH). A. Johnson, T. Phimminith, B. Pathoumthong, S. Ounmany, M. Rao
- Vientiane municipality wildlife trade. S. Vannalath, C. Vongkhamheng, T. Hansel, A. Johnson
- Asian elephant conservation on the Nakai Plateau. A. Johnson, S. Hedges
- Elders deer conservation. C. Vongkhamheng, A. Johnson, W. McShea, S. Ounmany
- Survey, assessment, and conservation of the Indochinese tiger. A. Johnson, C. Vongkhamheng
- Gibbon conservation through field studies and public-awareness raising. T. Hansel, A. Johnson, S. Vannalath, P. Thamlasin, S. Singh
- Siamese crocodiles project. M. Hedemark, J. Thorbjarnarson, Chanthone Phothitay
- MALAYSIA**
- Implementation of the review of the Sarawak Wildlife Master Plan. M. Gumal, C. Chin, M. Meredith
- Conservation of wildlife in production forest in Ulu Baram. C. Chin, M. Meredith
- Monitoring and conserving primates in Maludam National Park. J. Hon
- Surveys of orang utans in Sarawak. J. Rubis
- MONGOLIA**
- Eastern Steppe living landscape: Sustaining wildlife and traditional livelihoods in the arid grasslands of Mongolia. P. Zahler, W. Barton
- Research on Mongolian gazelles in the eastern steppes. G. Schaller, K. Olson, R. Samiyadan
- MYANMAR**
- Wildlife surveys. A. Rabinowitz, U Saw Tun Khaing
- Protected area review and evaluation. U Saw Tun Khaing
- Establishment of a tiger reserve in Hukawng Valley region. U Saw Htoo Tha Po, A. Rabinowitz, U Saw Tun Khaing, A. Lynam
- Northern Forest Complex (NFC) landscape project. A. Rabinowitz, U Saw Tun Khaing
- Reptile surveys. J. Thorbjarnarson, U Win Ko Ko, Kalyar, T. Swe, T. Lwin, G. Kuchling, K. Myo Myo
- Hunting for subsistence and trade in Northern Myanmar. M. Rao, U Than Myint
- Development and implementation of the National Tiger Action Plan. A. Rabinowitz, T. Lynam
- PAKISTAN**
- Status and conservation of the woolly flying squirrel; conservation education and biodiversity preservation in the Diamer and Gilgit districts. P. Zahler, Mayo Khan



## U Than Myint

FOR MORE THAN A DECADE, U THAN MYINT WAS forest officer for the Myanmar Department of Forestry and a lecturer at the Myanmar Forestry Institute. After completing his Masters degree at the Australian National University in Canberra, he returned home to Myanmar where he briefly worked on a UNFAO watershed project before joining WCS. For nearly eight years, Than Myint has served as training and research coordinator for the WCS Myanmar Program. His passion for the wildlife and forests of Myanmar have taken him on numerous expeditions and surveys. Together with WCS scientists Alan Rabinowitz, George Schaller, Madhu Rao, and Tony Lynam, he has studied wildlife in some of the last great forests of Indochina. This year, U Than Myint was appointed director of the WCS Myanmar Program.

# wcs field projects



## Liz Bennett

WCS'S HUNTING AND Trade Program was initiated in 2001 in response to the overwhelming and increasing threat to wildlife in tropical forests throughout the world. The threat is arising from unsustainable hunting and trade in wild animals and their parts for meat, skins, feathers, parts for traditional medicines, and for the pet trade (top, slow lorises in Hanoi market).



Most hunting in tropical forests today is not sustainable, and is causing population declines and local extinctions across large swathes of the landscape. Such loss of wildlife threatens the wider biodiversity of the forests as well as the lifestyles, health, and cultural well-being of forest peoples. WCS has on-the-ground projects to tackle these critical issues in 24 countries across Africa, Latin America, and Asia. The Hunting and Wildlife Trade Program, under the direction of Elizabeth Bennett (above), takes the knowledge and data gained from such long-term field presence and expertise and works with field staff to determine how to manage hunting and wildlife trade more effectively in various biological, socioeconomic, cultural, and political conditions across the tropical world. It then disseminates this information to policymakers at local, national, and international levels to try to improve the ways in which conservation and development communities are addressing this critical issue.

### PAPUA NEW GUINEA

Conservation education for primary and secondary schools. R. Sinclair, L. Dori, S. Tui  
Phylogeography of lowland birds. A. Mack, J. Dumbacher  
Biologist training for field techniques, project design, data analysis and report writing. A. Mack, D. Wright, R. Sinclair  
Bird of paradise behavior. E. Scholes  
Cassowary research in the Crater WMA and at Mt Mekil. A. Mack, D. Wright  
Ecology of long-beaked echidnas in the Crater WMA. M. Opiang, D. Wright  
Annual cycle of a montane forest (Mekil). B. Gamui  
Manus Island surveys. A. Mack, A. Williams  
Palm cockatoo research. P. Igag  
Megapode research and management. R. Sinclair  
Hunting in the Crater Mt. Wildlife Management Area. A. Mack, P. West, D. Wright

### PHILIPPINES

Bat survey. T. Mildenstein

### RUSSIA

Conservation and management of the Bears of Kamchatka. J. Paczkowski, G. Raygoredetsky, D. Miquelle  
Siberian tiger project. J. Goodrich, D. Miquelle, K. Quigley, E. Smirnov, A. Astafiev  
Mapping tiger habitat in Northeast Asia. D. Miquelle, A. Murzin, Y. Dunishenko, V. Aramilev  
Resolving human-tiger conflicts in the Russian Far East. J. Goodrich, B. Litvinov, N. Reebin, D. Miquelle  
Distribution and status of the Amur leopard. D. G. Pikunov, D. Miquelle, A. Kostirya, V. Aramilev  
Creation of a protected area in the Tavis Basin, Terney County. B. Litvinov, D. Miquelle  
Monitoring program for the Amur tiger. D. Miquelle, U. Dunishenko, D. Pikunov, V. Aramilev, P. Fomenko, G. Salkina, I. Nikolaev, V. Abramov  
Ecology and conservation of sympatric brown bears and Himalayan black bears in Sikhote-Alin Biosphere Reserve. J. Goodrich, A. Kostirya, V. Serodkin, D. Miquelle  
Survey of ungulates in Primorski and Khabarovski Krai. V. Aramilev, Y. Dunishenko, A.

Murzin, A. Myslenkov, D. Miquelle

Managing hunting leases for effective wildlife/tiger conservation. V. Aramilev, N. Kazakov, D. Miquelle  
Effect of logging on bird communities in the Russian Far East. J. Slaght  
Training a response team for tiger-human conflicts. K. Quigley, D. Armstrong, R. Cook, J. Goodrich, D. Miquelle  
Transboundary planning and management of Chinese reserves for tiger and leopard conservation. E. Zhang, D. Miquelle

### SOUTH PACIFIC

Existing and proposed forest reserves of Fiji and their effectiveness for conserving endemic invertebrates, herpetofauna, birds, and plants. M. Tuiwawa, B. Thaman, C. Morrison, A. Raikabula, S. Prasad, M. Tokota'a, D. Olson, Birdlife Fiji, E. Lomani, G. Wainiqolo, I. Qauqau  
Surveys of Fijian invertebrates: Testing the hypothesis of a Gondwanan origin for the Fijian biota. A. Cagitoba, A. Salusalu, M. Tokota'a, D. Olson  
Conservation requirements of the endangered Fijian giant longhorn beetles. S. Lal, G. Gravelle, D. Olson  
Conservation and restoration of critically endangered Fijian tropical dry forest. M. Tuiwawa, G. Keppel, A. Naikatini, J. Niukula, B. Thaman, D. Olson  
Landscape certification for logging operations as a tool for forest conservation in Fiji. L. Farley, A. Patrick, D. Olson  
Forest conservation awareness campaign and conservation education for primary and secondary schools for Fiji. L. Farley, B. Salusalu, A. Cakaunivalu  
A Heritage Tree Program for Fiji and implications for wildlife conservation. A. Patrick, L. Conkanasiga, A. Salusalu, A. Cagitoba, D. Olson  
Mahogany plantations and their impacts on freshwater stream quality and biodiversity, and invasiveness into natural forests. L. Farley, M. Fox  
Biological survey and conservation assessment of the Lomaiviti reefs, Fiji. M. Marnane, L. Farley, S. Dunlunawaqa, L. Sivo, G. Allen



#### **TAJIKISTAN**

Conservation of Marco Polo sheep and its landscape in the Pamir. G. Schaller

#### **THAILAND**

Developing Kaeng Krachan National Park as a high priority large carnivore site. A. Rabinowitz, T. Lynam  
Wildlife field research and conservation training program. A. Lynam, P. Manopawitr, Department of National Parks, Wildlife, and Plant Conservation  
Transboundary wildlife trade monitoring. Kalyar  
Tiger and Sumatran rhino conservation, Kaeng Krachan National Park. A. Lynam  
Wildlife training for the International Law Enforcement Academy. E. Bennett, A. Lynam, P. Manopawitr, U.S. Embassy, Royal Border Patrol Police, Department of National Parks, Wildlife, and Plant Conservation  
Gurney's pitta lowland rainforest conservation initiative. P. Manopawitr, K. Boonthawee, Oriental Bird Club, Border Police Patrol, Department of National Parks, Wildlife and Plant Conservation

#### **TIBET**

Chang Tang wildlife surveys and reserve planning. G. Schaller  
Biodiversity conservation in the Himalayas of the southeastern Tibetan Autonomous Region. G. Schaller, E. Zhang

#### **TURKEY**

Exploratory surveys. G. Schaller

### **Latin America**

#### **ARGENTINA**

Sea and Sky: A strategy for conserving open ocean biodiversity in the SW Atlantic. C. Campagna  
Patagonia coastal zone conservation strategies. G. Harris, C. Campagna, P. Yorio, R. Baldi, D. Boersma, Fundación Patagonia Natural, GEF-UNDP  
Patagonian steppe wildlife conservation initiative. A. Novaro, S. Walker, G. Harris  
Magellanic penguin ecology and conservation at Punta Tombo. D. Boersma  
Seabird ecology and conservation in Patagonia. P. Yorio, F. Quintana, E. Frere, P. Gandini, A. Schiavini  
Patagonia Coast, Jason Islands research and conservation;

Falklands/Malvinas. G. Harris, W. Conway, A. Taber  
Ecology and conservation of the huemul deer. A. Vila  
Tapir ecology and conservation. S. Chalukian  
Natural history and wildlife conservation. W. Conway  
Andean condor research and conservation. L. Jacome  
Burrowing parrot research and conservation. J. Masello  
Jaguar-livestock conflict: Comparing livestock management with mortality by predation and production. K. Schiaffino

#### **BELIZE**

Wildlife research and protected areas planning in tropical forests. B. Miller, C. Miller  
Neotropical bat conservation. B. Miller  
Jaguar research and conservation. C. Miller  
Monitoring jaguars in Cockscomb Basin Wildlife Sanctuary. S. Silver, L. Ostro  
Exploring human-jaguar conflict: Toward a possible model for Central America. S. Brechin  
Examining jaguar-livestock conflict in Cockscomb Basin Wildlife Sanctuary. B. Foster

#### **BOLIVIA**

Biodiversity research and conservation in the Madidi landscape. R. Wallace, L. Painter, H. Gomez, O. Hernandez  
Conservation and protected area management in the Bolivian Chaco. M. Painter, A. Noss, O. Castillo  
Conservation training and capacity building (Noel Kempff Mercado Natural History Museum). D. Rumiz, Missouri Botanical Garden  
Jaguar monitoring in Kaa-Iya del Gran Chaco National Park. A. Noss, D. Rumiz

#### **BRAZIL**

Mamirauá and Amanã Sustainable Development Reserves; management and conservation. H. Quieroz, R. da Silveira, A. Rita Alves  
Piagacu-Purus Sustainable Development Reserve. C. Pereira de Deus, R. da Silveira  
Landscape species conservation and planning in the Brazilian Pantanal. S. Marchini, S. Cavalcanti, M. Marmontel, C. Quintela



### **Rob Wallace/Lilian Painter**

TOGETHER, ROB WALLACE AND LILIAN PAINTER coordinate WCS's highly successful conservation program in northwest Bolivia, one of the most biodiverse regions on the planet. Since 1999, they have led an integrated conservation program across a complex of three protected areas—Madidi, Pilón Lajas, and Apolobamba—and an indigenous territory that together span almost 16,000 square miles. Rob has trained Bolivian professionals who are assuming important responsibilities in the national conservation community, and advanced the state of knowledge about key wildlife species, including the identification of a new monkey species. Lilian has led policy and outreach efforts that have resulted in the titling of the 1,300 square miles of Tacana indigenous territory and a participatory plan for its management.

# wcs field projects



## William McCoy

WILLIAM MCCOY (ABOVE, AT LEFT) IS THE FIELD supervisor for WCS's Marine Turtle Conservation Program in Nicaragua. A Creole Nicaraguan fisherman born and raised in the Caribbean coastal community of Pearl Lagoon, William has worked with WCS since 1998, collecting biological and socioeconomic information on the important populations of hawksbill and green turtles that inhabit Nicaragua's Pearl Cays. In the communities that depend heavily on a legal sea turtle fishery for both income and food, William is a well-respected voice for building sustainability into the local green turtle fishery while advocating complete protection for endangered hawksbills. He has been instrumental in achieving one of the program's big successes: ensuring the protection of nearly 100 percent of hawksbill nests from egg poaching, an increase of 80 percent during the project's three years. At clear risk to his own safety, William has challenged illegal habitat destruction on the cays by foreign developers and has served as an outstanding example of the power of local environmental stewardship and leadership. William has represented WCS at international sea turtle meetings and is an effective advocate for sea turtle conservation in Nicaragua and throughout the Caribbean.

Livestock depredation by jaguars and pumas in southern Pantanal. S. Calvacanti, S. Marchini  
Rancher Outreach Program. A. Hoogesteyn

### CHILE

Conservation and research program for Bernardo O'Higgins National Park. G. Harris  
Juan Fernandez Islands sea bird conservation and research. P. Hodum, M. Wainstein

### COLOMBIA

Ecology and conservation of biological diversity in the Central Andes of Colombia. C. Murcia, G. Kattan  
Conservation leadership and training program and Ucamari Center for Excellence. C. Murcia, G. Kattan, Fundación EcoAndina  
Design of a protected area system for Riseralda; technical assistance; national parks unit. C. Murcia, G. Kattan, Fundación EcoAndina

### COSTA RICA

Jaguar research and conservation in dry forests. E. Carrillo  
Ecology and conservation of white-lipped peccaries and jaguars in

Corcovado National Park. E. Carrillo

Behavioral study on depredating jaguars on marine sea turtles in Tortuguero National Park. M. Alvarez

### CUBA

Reptile research and conservation in coastal habitats. J. Thorbjarnarson, R. Rodríguez Soberón, M. Alonzo Tabeth  
Status and conservation of the Cuban crocodile in the Zapata Swamp. J. Thorbjarnarson, R. Targarona  
Ecology and management of American crocodiles in the Birama Swamp. J. Thorbjarnarson, R. Soberon

### ECUADOR

Biodiversity research and conservation in the Yasuni-Napo landscape. A. Jorgenson, G. Zapata

### GUATEMALA

Community-based conservation and biodiversity monitoring in the Maya Forest. R. McNab, J. Radichowsky, A. Rodríguez  
Scarlet macaw ecology and



conservation. R. McNab  
Institutional strengthening of  
Asociación Balam. R. McNab  
Impacts of subsistence hunting  
upon jaguar and puma in the  
Maya Biosphere Reserve. A.  
Novack

#### MEXICO

Movements, habitat relations, and  
prey relations of female jaguars in  
jaguar peripheral habitat, SE  
Sonora. O. Rosas Rosas  
Borderlands jaguar detection  
project. J. Childs

#### NICARAGUA

Status and conservation of the  
jaguar and a characterization of  
its hunting practices in the Indio  
Maiz Biological Reserve.  
C. S. Gomez Fuentes

#### PANAMA

Status of jaguars in Darien National  
Park. R. Moreno

#### PERU

Sustainable use and management of  
the vicuna. C. Sahley  
Wildlife conservation in the  
Peruvian Amazon of Loreto. R.  
Bodmer, P. Puertas

#### VENEZUELA

Conservation of the Caura River  
watershed. J. Ochoa, M.  
Bevilacqua  
Fish ecology, use, and conservation  
in the Caura watershed. F. Daza  
Ecology and habitat use of  
spectacled bears. I. Goldstein  
Conservation of the Orinoco  
crocodile. A. E. Seijas, J.  
Thorbjarnarson  
Jaguar private refuge in El Baul  
region, Cojedes State. M. Olmos,  
A. Gonzalez-Fernandez  
Educational and training handcraft  
workshop for Jaguar Private  
Refuge in El Baul region, Cojedes  
State. M. Olmos  
Creation of a library specializing on  
Neotropical carnivores with  
emphasis on the jaguar and  
puma. A. Gonzalez-Fernandez,  
Cartlemen's Association of  
Carabobo State, L. Arriaga  
Status and conservation of wild  
populations of Orinoco  
crocodiles in Venezuela. J.  
Thorbjarnarson, A. E. Seijas

#### REGIONAL

Amazonian conservation. A. Taber,  
F. Marques  
Flamingo ecology and conservation.  
Grupo para la Conservación de

Flamencos Altoandinos. F.  
Arengo  
Jaguar conservation program. E.  
Carillo  
Jaguar surveys and monitoring. S.  
Silver  
Conservation science training. P.  
Feinsinger  
Protected area training. J. Barborak  
Contributions to the continuing  
development of the  
Mesoamerican Society for  
Conservation Biology. J.  
Barborak, A. Carr III

### Marine

#### ARGENTINA

Exploring sustainable options for  
the management of Patagonian  
coastal benthic fisheries. L.  
Orensanz, A. Parma  
Developing an open ocean  
conservation area for the  
protection of marine mammals  
and sea birds: A Park of Sea and  
Sky. C. Campagna, C. D'Agrosa,  
L. Lauck

#### BAHAMAS

Provide scientific and technical  
support to establish the first five  
marine reserves of a planned  
nationwide network in the  
Bahamas. B. Alevizon

#### BELIZE

Development of monitoring  
techniques for marine reserves  
and a long-term atoll monitoring  
program for Glover's Reef. C.  
Acosta  
Glovers Reef Marine Research  
Station (GRMRS). T. Duncan, J.  
Clamp  
Coral reef and algae population  
dynamics and reef restoration:  
Understanding the influence of  
nutrients and organic matter on  
reef erosion and algal growth. T.  
McClanahan, B. Cokos  
An evaluation of Caribbean shark  
species. E. Pikitch, D. Chapman  
Conservation of Nassau grouper  
spawning aggregations. E. Sala, E.  
Ballesteros, R. Starr  
Larval dispersal on the  
Mesoamerican reef. J. Purcell  
Regional marine conservation and  
policy development. J. Gibson, C.  
Carr  
Raising Nassau grouper for  
stocking in Belize: An evaluation  
of aquaculture as a tool to build,  
restore, and conserve depleted  
stocks. J. Carter  
Spatial conservation database for  
Glovers Reef Marine Reserve. P.



Marine Program field conservationist Ramón Bonfil and his team  
capture a great white shark off the coast of South Africa.

Mumby, H. Renken  
Glovers Reef living seascape:  
Safeguarding marine resources  
and rural livelihoods in Belize. J.  
Gibson, C. D'Agrosa

#### CHILE

Blue whale ecology and  
conservation in coastal  
productive areas off Chile. R.  
Hucke-Gaete

#### CUBA

Marine and coastal conservation in  
Cuba. C. Carr, F. Arengo, J.  
Thorbjarnarson, R. Cerroni, P.  
Heylings

#### FIJI

Community-based conservation of  
the Lomaiviti Island group. D.  
Olson, L. Farley  
Small grants program for marine  
conservation. D. Olson

#### INDIA

Strengthening dolphin conservation  
activities in the Vikramshila  
Gangetic Dolphin Sanctuary. B.  
Smith  
Investigating the status and ecology  
of Ganges river dolphins,  
*Platanista gangetica*, and  
Irrawaddy dolphins, *Orcaella*

*brevirostris*, in the Sundarbans  
Delta. B. Smith

#### INDONESIA

Rebuilding effective marine  
management at Karimunjawa  
National Park. J. Wibowo, M.  
Marnane, S. Campbell  
Evaluating the status of coral reef  
ecosystems and socio-cultural  
management systems. T.  
McClanahan

#### KENYA

Conservation research on coral  
reefs. T. McClanahan  
Integrating adaptive management  
techniques into marine reserve  
management system. T.  
McClanahan  
Internship and training in coral reef  
research methodologies. T. R.  
McClanahan, N. Muthiga, J.  
Maina  
Enhancing sea turtle conservation.  
N. Muthiga, S. Nzuki, G.  
Okemwa, E. Mueni  
Strengthening marine conservation  
in the Western Indian Ocean. N.  
Muthiga, S. Nzuki, T.  
McClanahan

#### MADAGASCAR

Improving the monitoring and

# wcs field projects



## Justina Ray

LIKE MANY IN THE WCS FAMILY, JUSTINA RAY started as an intern at WCS's Bronx Zoo headquarters in 1987, then secured research fellowships in central Africa and eastern North America. Hired as a staff zoologist in 2002, Justina (above, on left, with pilot Marty Webb in northern Ontario) is now director of the newly incorporated WCS Canada Program.

Justina's research has spanned habitats ranging from tropical rain forests to subarctic taiga, with the ecology and conservation of carnivores as common themes. Her PhD research in the Central African Republic was the first carnivore community study in an African rain-forest environment. She then completed a collaborative project in New York's Adirondack Park, evaluating behavioral responses of carnivores to human land-use changes. Currently, she is a key partner in the first ecological study of wolverines in the lowland boreal forests of northern Ontario, providing critical information for land-use planning in a vast, as yet undeveloped region.

management of the Masoala marine parks. P. Doukakis  
Development of an Integrated Coastal Zone Management Plan for Antongil Bay. B. Randriamantsoa, A. Cooke, S. Harding  
Developing conservation strategies for the shark fishery of Antongil Bay. M. Jonahson, H. Randriamahazo  
Investigating the fish diversity and marine ecology of the Sahamalaza Biosphere Reserve. H. Randriamahazo, B. Randriamantsoa  
An integrated approach to humpback whale and marine mammal research and conservation: Photographic identification, conservation genetics, acoustics, GIS analysis and satellite telemetry. H. Rosenbaum, P. Ersts, Y. Razafindrakoto, S. Nguessono, C. Pomilla, V. Rasoamampianina  
Developing sustainable conservation-oriented whale watching. H. Rosenbaum, Y. Razafindrakoto, S. Nguessono, V. Rasoamampianina  
The impact of hunting and incidental catch of small cetaceans. H. Rosenbaum, Y.

Razafindrakoto, N.  
Andrianarivelo

### MYANMAR

Feasibility assessment for establishing a long-term site-based program and protected area for dolphin conservation in the upper reaches of the Ayeyarwady River. B. Smith

### NICARAGUA

Monitoring and characterizing hawksbill sea turtle nesting populations, foraging aggregations, and migratory patterns through beach surveys, satellite tagging, and mark/recapture. C. Lagueur, C. Campbell  
Mark/recapture study and genetic stock assessment of hawksbill nesting populations and green, hawksbill, and loggerhead foraging aggregations. C. Lagueur, C. Campbell

### NORTH AMERICA

A pilot study to determine habitat use of juvenile green sturgeon in the Rogue River, and determine when juvenile green sturgeon leave the river and enter the ocean. D. Erickson



Estimating the abundance of adult green sturgeon in the Rogue River using underwater camera and broad-band acoustic survey techniques. D. Erickson  
 Determining potential impacts of jet boat activity on green sturgeon behavior. K. Hanson, D. Erickson  
 Evaluating oceanic migration patterns of adult green sturgeon tagged in the Sacramento, Klamath, and Rogue rivers. D. Erickson, K. Hanson

#### PANAMA

Hawksbill turtle population recovery in the Comarca Ngöbe-Bugle Chiriqui Beach/Escudo de Veraguas and the Bastimentos Island National Marine Park. A. and P. Meylan  
 Ecology and migration of Bocas del Toro sea turtles. A. Meylan, P. Meylan

#### PAPUA NEW GUINEA

Development of a training program for marine scientists and coral reef conservation. M. Marnane

#### RUSSIA

Identifying critical habitat and assisting with the development of protected areas for the endangered Sakhalin sturgeon in the Tunmin River. D. Erickson  
 Conservation of critical habitat for beluga sturgeon. E. Pikitch, D. Erickson, P. Doukakis, S. Crownover

#### SOUTH AFRICA

Ecology and conservation of the great white shark. R. Bonfil

#### THAILAND

Development of a training manual on research techniques for conserving cetaceans and sirenians in developing countries. B. Smith  
 Assessing the status of Irrawaddy dolphins and developing an action plan for their conservation in Songkhla Lake. B. Smith

#### REGIONAL

Conservation and restoration of salmon ecosystems and wildlife of the North Pacific Rim. L. Lauck, S. Zack

#### GLOBAL

WildlifeSAIL- Global Circumnavigation on a 47-foot sailing catamaran to promote education and awareness of ocean conservation. J.F. Thye, F. Wilkin

Developing a technology toolbox for the design of marine protected areas. J. Lindholm, R. Cerroni  
 Human footprint in the marine environment. E. Sanderson, L. Lauck, C. D'Agrosa  
 Determining conservation units and species/population relationships among humpback dolphins throughout their range. H. Rosenbaum, S. Glaberman, T. Jefferson, T. Collins, G. Minton, V. Peddemors, R. Baldwin  
 Role of genetic diversity in the recovery of the highly endangered north Atlantic and north Pacific right whale. H. Rosenbaum  
 Bowhead whale genetic diversity and population structure: An exploration of human and climate induced changes in genetic variation. H. Rosenbaum, G. Amato  
 An investigation of the responses of coral reefs to global climate change. A. Baker

## North America

### NEW YORK METROPOLITAN REGION

Working with local planners to integrate biodiversity conservation in New Jersey and New York (Croton-to-Highlands, Walkkill Valley and Farmington Valley). M. Klemens, H. Gruner, N. Miller, J. Schmitz  
 Eastern Westchester biotic corridor. M. Klemens, N. Miller  
 Conserving amphibians in human-fragmented landscapes. M. Klemens, H. Gruner, N. Miller  
 Great Swamp cooperative conservation program. M. Klemens, N. Miller  
 Nature in fragments: Urban sprawl's effect on biodiversity. M. Klemens, N. Miller, J. Schmitz  
 The moveable feast for wildlife and people. M. Klemens, N. Miller, J. Schmitz  
 Public-private land stewardship in Rockefeller State Park Preserve and private lands. M. Klemens, N. Miller

### NORTHERN FORESTS

Climate Change in the Adirondacks. J. Jenkins  
 Adirondack Communities and Conservation Program. Z. Smith, L. Karasin  
 Adirondack Living Landscapes Program. M. Glennon, A. Keal  
 Adirondack Cooperative Loon Program. N. Schoch, M. Glennon, V. Trudeau, D. Adams, D. Evers, E. Realarbutio

*Adirondack Atlas*. J. Jenkins, A. Keal  
 Black Bear Education, Awareness and Research (BBEAR). Z. Smith, M. Glennon, L. Karasin  
 Oswegatchie Roundtable: A multi-stakeholder forum in the Adirondacks. B. Weber  
 Local impacts of climate change and changes in land use on water quality and the winter economy in the Adirondacks: A case study of the Consortium for Atlantic Regional Assessment. A. Fisher, R. Dempsey, L. Karasin  
 Social implications of wildlife conservation in low-density development areas. H. Kretser  
 Use of bridges and road structures by wildlife within Virginia. W. McShea and partners  
 White-tailed deer overpopulation, impacts, and movement. W. McShea and partners  
 Ecology and conservation of a fire-dependent species, Turkeybeard, in western Virginia. W. McShea and partners

### CANADA

Advisors to CPAWS on research and protected area management. J. Ray, A. Rabinowitz  
 Conservation planning and research in Ontario's Northern Boreal Forest. J. Ray  
 Trans-boundary conservation planning in the Northern Appalachians and the northeastern mesocarnivore initiative. J. Ray  
 Nahanni grizzly bear surveys: Redesign of a National Park and World Heritage Site. J. Weaver  
 Crowsnest Pass Highway: A crucial link for carnivores. J. Weaver  
 Using models to define wildlife corridors in the Crowsnest Pass. C. Chetkiewicz

### CROSS- AND INTERCONTINENTAL

Understanding wolf predation on domestic animals. A. Treves  
 Survey attitudes toward wolves and perceptions of wolf management. L. Naughton  
 Analyzing lethal and non-lethal wolf depredation control. A. Treves  
 Conservation of red knots in the western hemisphere. L. Niles  
 Conservation in native communities. J. Hilty, W. Maillet, J. Ray, J. Weaver  
 Development of the large carnivore guild model. A. Rabinowitz

### PACIFIC WEST

Effect of sudden oak death

syndrome on wildlife in the Pacific West. K. Fischer  
 Woodpeckers and snag dynamics. S. Zack, K. Farris, and partners  
 Riparian restoration, beavers and songbirds. S. Zack, H. Cooke, and partners  
 Conservation of salmon-driven ecosystems. S. Zack  
 Tundra nesting birds, predators, and development in the Arctic Coastal Plain. S. Zack, J. Liebezeit, and partners  
 Wildlife, fire and forest management. S. Zack, K. Farris, and partners

### WESTERN MOUNTAINS

Wolverine ecology and conservation. R. Inman, K. Inman  
 Cougar/wolf/bear interactions. T. Ruth, P. Buotte  
 Carnivore connectivity in the Centennial Mountains. J. Beckman  
 Moose and returning grizzlies and wolves. J. Berger  
 Pronghorn migration conservation. J. Berger, K. Berger, J. Beckman  
 Pronghorn, wolf, and coyote dynamics. K. Berger, J. Berger  
 Setting priorities for wildlife conservation. C. Groves  
 New Mexico black bear conservation. C. Costello

## Central

### NEW YORK

#### WASHINGTON, D.C.

Science and Exploration Program. G. Schaller, A. Rabinowitz  
 Living Landscapes Program. A. Vedder  
 WCS Institute. K. Redford  
 Training and Capacity Building Program. W. Banham, M.L. Penn  
 Foundations of Success. R. Margoluis, N. Salafsky, J. Davis, C. Stern  
 Conservation Finance. C. Quintela, R. Victorine, C. Rastas  
 BP Conservation Awards Partnership. J. Robinson, W. Banham  
 Zoological Society of London Collaboration. M. Hatchwell  
*State of the Wild* annual conservation publication. S. Guynup, J. Bruschini  
 Engaging local people in wildlife conservation: A survey of WCS approaches. A. Vedder  
 People and Parks: Assessing the human welfare impacts of establishing protected areas for biodiversity conservation. D. Wilkie  
 The Mannahatta Project. E. Sanderson  
 Bronx River Historical Ecology. E. Sanderson

# public affairs

PUBLIC AFFAIRS BROKE NEW GROUND THIS YEAR, TAKING the WCS conservation mission and messages to additional audiences in innovative ways. From forming strategic partnerships to increasing the WCS presence household by household, our Communications, TV and Media, Government Affairs, and Marketing departments raised awareness of WCS and built relationships with organizations and individuals that will lead to increased funding, higher zoo and aquarium attendance, and better policy-making.

We made great strides in raising WCS's public policy profile in Washington, D.C. WCS's new office in the capital developed a comprehensive government outreach program to bring WCS scientists and staff to congressional testimonies, briefings, and press conferences. Collaborating with major conservation organizations, WCS led a pioneering effort to draft a common legislative agenda for biodiversity. WCS also took a leadership role in passing the Marine Turtle Conservation Act, thanks to Capitol Hill testimony by John Robinson, senior vice president of International Conservation, and a concerted congressional and public outreach campaign. Alan Rabinowitz, director of Science and Exploration, successfully urged Congress to introduce the Great Cats and Rare Canids Act, a bill to increase conservation funding for over a dozen endangered felids and canids.

Shortly after Robert Cook, chief veterinarian, and James Breheny, associate general curator, helped New York City authorities remove a 400-pound tiger from a New York apartment, WCS generated thousands of e-mails and letters urging Congress to ban big cats as pets. In December 2003, Congress passed and President Bush signed the Captive Wildlife Safety Act. An important step in ending the big cat pet trade in the United States, the law bans the interstate trade and importation of big cats as pets. The new federal ban, however, does not prevent the big cat pet trade within the borders of 31 states, including New York. In July 2004, WCS worked with the New York State legislature to pass a law banning the private ownership of big cats and many other exotic pets.

WCS achieved record-breaking success as the only organization awarded three National Leadership Grants, the most competitive and prestigious honor awarded by the Institute of Museum and Library Services (IMLS). The Bronx Zoo Education Department received the largest award in its category to offer professional development for educators at small, infor-

mal science institutions. And Central Park Zoo, in collaboration with the Poet's House, received its first IMLS Leadership Award, to create a Poet-in-Residence program integrating poetry into exhibitions and gardens.

As a result of our City Council Outreach Program, WCS received more than \$16 million in capital funds for all five facilities. Additional funds were secured for renovation of the Bronx Zoo's Lion House, a shark exhibit at the aquarium, and big cat exhibits at the city zoos.

Continuing our vital support of the Bronx River, we awarded a second round of grants to local environmental groups through the WCS/NOAA Regional Partnership and the ongoing commitment of Congressman José E. Serrano. Projects range from pier stabilization to WCS's historical restoration of the

lower Bronx River watershed. In collaboration with Literacy Inc., the Community Affairs department continued its T.I.G.E.R.

reading program and support of literacy in our local public schools.

This year the program brought about 1,000 second-graders to the Bronx Zoo to visit new Mitsubishi Riverwalk.

Building upon the success of the Close Encounters public lecture series, WCS formed a multi-year partnership with the 92nd Street Y. The first season—a sell-out—featured WCS CEO and President

Steven E. Sanderson, Senior Research Scientist Diana Reiss, Field Veterinarian William Karesh, Director of Science and Exploration Alan Rabinowitz, and Vice President of Science and Exploration George Schaller.

Communications targeted new media venues, including the opinion and editorial pages of major daily newspapers. Steve Sanderson's editorial on global wildlife health issues, "Killing Civets is Not the Way to Fight SARS," was prominently featured in the *International Herald Tribune*. The *New York Times* wrote a positive editorial in response to the news that WCS had, after more than a century, adopted the nickname of our flagship facility and officially named the Bronx Zoo . . . the Bronx Zoo. Senior Vice President and General Director of Living Institutions Richard Lattis's letter caution-

**Tigers received significant media attention, from Living Institutions' staff rescuing a tiger from a New York City apartment, to Government Affairs' action on legislation banning big cats as pets, to Community Affairs' T.I.G.E.R. public school literacy program.**









ing against big cats as pets was selected for inclusion in the *Washington Post*.

Key press hits brought WCS, its people, and programs before millions. Among them were the creation of Gabon's national parks on CNN and National Public Radio, and in *USA Today*; jaguar work in a *New York Times* feature by Pulitzer Prize-winning author Natalie Angier; our unique collaboration to reduce logging impacts in the Congo Basin in a special *Times* pull-out section that coincided with the Johannesburg World Summit on Sustainable Development; and our work to save Cuban crocodiles from extinction on *CBS Evening News*, exposing some 20 million viewers to our unique conservation programs.

On an entirely different level, Comedy Central's *The Daily Show with Jon Stewart* featured a smart piece on same-sex penguin pairs at the Central Park Zoo, with Director Dan Wharton doing a masterful job as WCS's on-air expert. And Bronx Zoo Tiger Mountain Keeper Nicole Rella was profiled in *Cosmopolitan* as a "Fun Fearless Female."

Our media relationship with the National Geographic Society (NGS) strengthened in its second year. In addition to featuring our work in numerous publications and films, NGS contributed support and hundreds of magnificent photos to the President of Gabon's second book, produced by WCS Gabon and the WCS Exhibits and Graphic Arts Department. The book will help attract the tourism and investment necessary to keep that country's new national parks system alive. Various NGS granting agencies funded conservation research and expeditions for the MegaFlyover, an aerial GPS survey of Africa's people and wildlife.

Three articles in *National Geographic* magazine, with a circulation of 6.7 million worldwide, featured WCS. Two of them were written by WCS staff, also a first in our history. Alan Rabinowitz described his grueling but successful struggle to create a tiger reserve in Myanmar's Hukawng Valley, and Mike Fay shared the joys and responsibilities of living and working in Gabon. In "Saving Africa's Edens," the magazine prominently featured WCS's work with the government of Gabon in the creation of its national parks.

Our first National Geographic Special, "In Search of the Jaguar," premiered in November, and reached more than 10 million households with Rabinowitz's passionate views on WCS's role in saving these magnificent cats. "Africa's Last Eden," a companion to the magazine story, featured WCS at work in Gabon and the challenges of carving parks out of the wilderness and protecting their wildlife.

In addition, we completed four of our first six children's books with HarperCollins: *Tigers*, *Whales*, *Gorillas*, and *Sharks*. Two books will follow in 2005, and a renewal of the series is imminent. We also produced the WCS identity film, *A*

*Greenprint for Tomorrow*, as well as collaborated with the BBC on the series *Planet Earth*.

Marketing began to develop a consumer relation program designed to build and target a larger audience for WCS on all fronts. Through this grassroots effort, we are capturing valuable Living Institutions' visitor data and corresponding with new audiences via e-news distribution to more than 150,000 e-mail addresses locally and nationally, as well as through other communication vehicles. Additionally, the Group Sales staff rolled out an off-site visibility program at Bronx and Westchester County events, distributing WCS materials and enrolling participants in WCS's new e-mail campaigns to raise brand awareness.

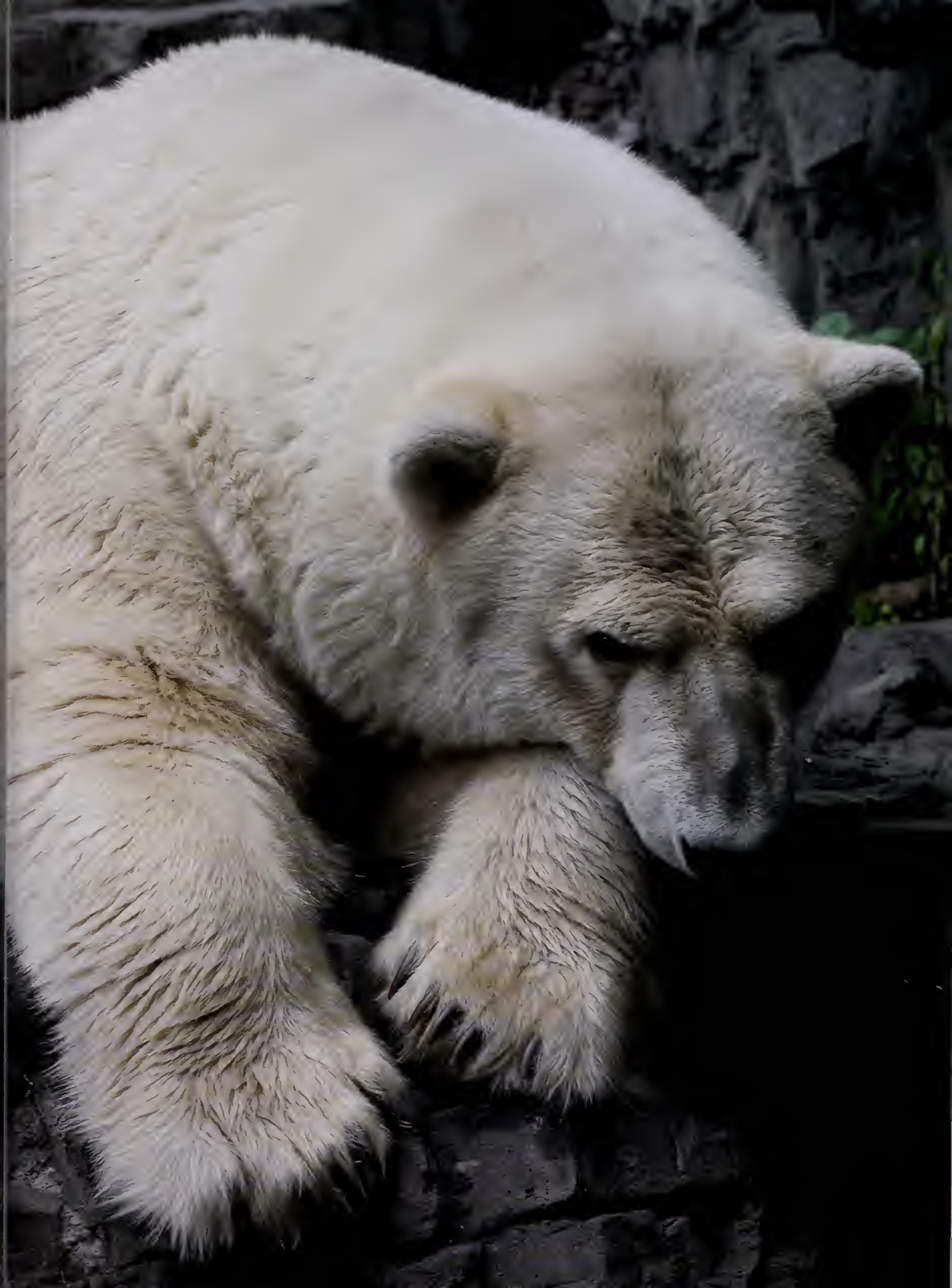
This year, in a brand-new advertising strategy, WCS marketed all five of the Living Institutions under one umbrella. The "Extreme Summer" advertising and consumer promotions focused on unique traits of wild animals—from the biggest to the smallest, the most colorful to the best camouflaged. And for the first time in the Bronx Zoo's history, we extended our operating hours every Saturday in July for Summer Nights. The first Hispanic Heritage Weekend, in mid-September, was sponsored by EPPA. Well received by the community and guests alike, it brought in 22,000 people. Holiday Lights also realized a profit of more than \$200,000, achieved through careful reductions in expenses and enhancements of sponsorships.

Communications, Sponsorship, and Event Marketing collaborated with Archie Comics to develop a partnership that resulted in a special commemorative edition of *Archie* featuring the Bronx Zoo grizzly bears Archie, Jughead, Betty, and Veronica, as well as Senior Wild Animal Keeper Jeff Munson, Conservation Ecologist Joel Berger, and the Living Institutions' Animal Enrichment Program. A portion of the 25,000 copies of the commemorative edition donated to the zoo was distributed to children who attended the special Extreme Survivors Weekend.

Public Affairs exceeded its 2004 revenue goals and funding expectations on all fronts. Sponsorship inked a deal with Delta Air Lines, and renewed relationships with Norwegian Cruise Line, Fleet, and Amerada Hess, exceeding its revenue goal and raising \$2.52 million in cash and in-kind services. Group Sales had a 27 percent growth in revenue over the previous year. Corporate Events at all facilities exceeded goals with a combined revenue of \$566,241. Central Park Zoo and the New York Aquarium continued to grow their revenue from feature film shoots, which brought in more than \$83,000 in total.

Individual animals at our Living Institutions garnered remarkable media coverage for WCS during the year—from a giant alligator snapping turtle named Izzy, to snow leopard cub Biscuit, to polar bears at the Central Park Zoo (opposite).













**year in review.** Opposite, clockwise from top: Unveiling of “new” Bronx Zoo name; Bronx Zoo Poetry Safari winners; T.I.G.E.R. public school literacy program with Community Affairs Director Charles Vasser and Region 1 School Leadership Team Coordinator Joan Prince; WCS Corporate Relations and Special Events Director Dale Brooks receives check from Fuji Corporate Contributions and Community Affairs Director Judy Matson; Mayor Michael Bloomberg and Avril Dominguez, the 5,000th Make-A-Wish Foundation of Metro New York recipient, turn on Holiday Lights 2003. This page, clockwise from top: Bronx Zoo visit by delegation from Benin, West Africa; celebration of Black History Month; former President Bill Clinton visits Congo Gorilla Forest; WCS staff honored for 20 years of service; WCS Trustee Julian and Josie Robertson with Mammal Department staff at Tiger Mountain.





THE WILDLIFE CONSERVATION SOCIETY CLOSED THE FISCAL year on June 30 with a small operating surplus; operating revenue and support exceeded expenditures by \$878,000 (six-tenths of one percent). This is the third year of significant improvement in financial performance, thanks to strong private contributions and government grant support, healthy attendance and related revenue, and careful expense controls.

Operating revenue and support rose by 12 percent from the prior year to \$145 million. Contributed support increased \$7 million, or 24 percent, to a new high of \$37 million, fueled by gifts and grants to our international conservation programs, which was leveraged by the Robert Wilson Challenge grant, and support of WCS core activities by several splendid foundation grants and the unstinting generosity of our trustees and friends. Visitation at our five parks recovered nicely from the previous year's disappointing results, increasing 9 percent to 3.9 million visitors. Revenue from admissions and guest services totaled \$39 million—a 25 percent increase, another

## Visitation of our five parks recovered nicely from the previous year.

record high, and the product of higher attendance, more effective pricing, and service improvements.

Total operating expenditures were \$144 million. Program services expenditures and on-site guest-related costs were \$124 million, increasing 11 percent in total. Expenditures for International Conservation activities grew rapidly again this year to \$44 million, a 37 percent increase, which represents more than a tripling of activity from the \$16 million expense level just five years ago. Expenditures for our Living Institutions—the Bronx Zoo, the New York Aquarium, and the City Zoos—totaled \$70 million, increasing 3 percent in the aggregate.

Controllable core expenses in many areas remained flat. Expense control is an important part of our budget-balancing efforts. However, like other institutions, WCS continues to absorb increases in expenses that are determined by external factors, most notably insurance costs, which rose sharply again due to industry trends, higher required pension contributions necessitated by weak investment markets in prior years, and the continued increase in the cost of health insurance for our staff. Administrative and support services, including fundraising and membership expenses, totaled \$16 million. Selective investments were made in financial, legal, fundraising, and other administrative services to manage effectively our growing programmatic activities in New York and throughout the world. Even so, support services made up a lean 11 percent of the expense base, unchanged from the prior year.

In FY 2002, WCS began to set aside a portion of unrestricted income in a facilities renewal fund to support with recurring revenues a portion of the infrastructure, equipment, and technology needs of our aging facilities. In FY 2004, that fund totaled \$4 million. It is our intention to add to this allocation over time as one component of a plan to finance facility needs.

Capital expenditures totaled \$14 million and included completion of two exhibits: a thick-billed parrot habitat at Queens Zoo, which opened to the public in July, and the Bronx Zoo's Mitsubishi Riverwalk, opened in April. Spending on construction of the New York Aquarium's new restaurant totaled nearly \$6 million. Funding was also provided for a number of important infrastructure and animal support facilities and planning for future exhibits at the Bronx Zoo and the aquarium.

Our balance sheet continued to strengthen, with total assets reaching \$685 million. Investment assets increased by \$44 million to a market value of \$377 million—the result of robust investment returns of 15.1 percent, \$5 million in new endowment gifts, and increases in other donor funds. The most notable change in the balance sheet is the addition of \$67 million in bonds payable. In February, WCS issued tax-exempt bonds through the New York State Trust for Cultural Resources. All bonds were issued with a fixed interest rate over 30 years, and WCS was able to take advantage of tax-exempt fixed rates near historic lows; our average interest cost is less than 4.6 percent. Through this bond issue, WCS raised a \$60 million construction fund, a crucial component of our plan to finance the capital needs of the Bronx Zoo and the Aquarium, in concert with governmental funds and private contributions. As part of the bond issuance, WCS completed the investment rating process with Standard and Poors and Moody's Investor Service, receiving equivalent AA bond ratings from Moody's (AA3) and Standard and Poors (AA-)—among the highest in the New York cultural community and peer conservation organizations.

This was a very successful year. Our wildlife parks, international conservation activities (right, sea lions off the coast of South America), and education programs continued to enjoy public and critical success. However, continued financial strength depends upon our success on several fronts. Foremost is the preservation of high public attendance and membership through the excellence of our living institutions and education programs. Our partnership with the City of New York, one of our most important and enduring assets, must be sustained. We must be constant in efforts to raise and diversify our revenue base and control expenses. Finally, we must continue to develop and support the individuals who make up the WCS staff in New York and in our field programs throughout the world. They are the greatest source of our distinction and our energy. As we look ahead, it is their creativity, talents, and dedication that will sustain our institution and its fiscal strength.





# Operating Revenues and Expenses YEAR ENDING JUNE 30, 2004 (COMPARATIVE AMOUNTS FOR 2003)

	<b>\$ THOUSANDS</b>	
<b>REVENUE</b>	<b>2004</b>	<b>2003</b>
Contributed	\$37,449	\$30,312
Membership Dues	8,246	7,730
Investment Income	15,854	16,392
City of New York	23,669	24,135
New York State	2,448	1,904
Federal Agencies	10,521	10,555
Non-governmental Organization Grants	3,008	1,819
Gate and Exhibit Admissions	22,249	17,704
Visitor Services	16,667	13,527
Education Programs	1,355	1,265
Sponsorship, Licensing, and Royalties	1,626	1,513
Other	1,896	2,277
<b>Total Revenue</b>	<b>\$144,988</b>	<b>\$129,133</b>
<b>EXPENDITURES</b>		
<b>Program Services</b>		
Bronx Zoo	\$43,002	\$42,475
New York Aquarium	10,243	9,648
City Zoos	13,706	13,101
International Programs	43,777	31,843
<i>Wildlife Conservation Magazine</i>	1,351	1,415
Lower Bronx Habitat Restoration	1,923	5,255
Total Program Services	\$114,002	\$103,737
<b>Visitor Services</b>	<b>\$10,122</b>	<b>\$9,304</b>
<b>Supporting Services</b>		
Management and General	\$10,236	\$8,950
Membership	2,454	2,557
Fundraising	3,296	2,907
Total Supporting Services	\$15,986	\$14,414
<b>Plant Renewal Funding</b>	<b>4,000</b>	<b>2,000</b>
<b>Total Expenses and Plant Renewal Funding</b>	<b>\$144,110</b>	<b>\$129,455</b>
<b>Excess of Expenses and Plant Renewal Funding Over Revenues</b>	<b>\$878</b>	<b>\$(322)</b>

*A copy of the audited financial statements is available upon request.*



# Consolidated Balance Sheets

JUNE 30, 2004, AND 2003

## \$ THOUSANDS

### ASSETS

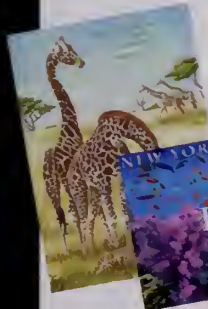
	2004	2003
Cash and Cash Equivalents	\$38,355	\$30,926
Accounts Receivable	2,169	1,803
Receivable from the City of New York	7,076	9,551
Receivable from the State of New York	3,436	1,901
Receivable from Federal Sources	22,340	24,426
Grants and Pledges Receivable	15,317	19,849
Inventories	1,506	1,244
Prepaid Expenses and Deferred Charges	8,198	7,056
Investments	376,688	332,591
Amounts Held in Trust by Others	933	192
Funds Held by Bond Trustee	60,574	
Property and Equipment	148,225	147,214
Total Assets	\$684,817	\$576,753

### LIABILITIES AND NET ASSETS

Accounts Payable and Accrued Expenses	\$21,212	\$17,762
Amounts Held on Behalf of Others	3,000	1,250
Annuity Liability	2,659	2,098
Borrowing Under Line of Credit		10,500
Bonds Payable	66,831	
Post Retirement Benefit Obligation	14,718	13,606
Total Liabilities	\$108,420	\$45,216
Net Assets		
Unrestricted:		
Designated for Long-term Investment	152,050	116,027
Investment in Property and Equipment	143,658	147,214
Total Unrestricted	\$295,708	\$263,241
Temporarily Restricted	83,961	76,377
Permanently Restricted	196,728	191,919
Total Net Assets	\$576,397	\$531,537
Total Liabilities and Net Assets	\$684,817	\$576,753







■ **SAFARI! GALA.** More than 600 attended the spring Gala, held on May 26 at Central Park Zoo. Honored this year: National Geographic Society President and CEO, John M. Fahey, Jr. and *National Geographic* photographer Nick Nichols. Allison and Leonard Stern were Honorary

Event Chairs. Susan and Jack Rudin, Ashley R. Schiff, Virginia and Warren Schwerin, and Ann and Thomas Unterberg were Gala Co-Chairs. Opposite, clockwise from top left: Jamee Gregory, Honorary Event Chair and WCS Trustee Allison Stern, Susie Hayes; Gala Co-Chair and WCS Trustee Ann Unterberg and Thomas Unterberg; Warren Schwerin and Gala Co-Chair and WCS Trustee Virginia Schwerin; Mayor Michael Bloomberg, WCS Chairman of the Board David T. Schiff, WCS Trustee Norma Dana, WCS President and CEO Steven Sanderson; Steve Sanderson, John Fahey, Nick Nichols, David Schiff; Vasthi Acosta, WCS Trustee Rolando T. Acosta; President of Mitsubishi International Corporation Foundation James Brumm and Yuko Brumm.

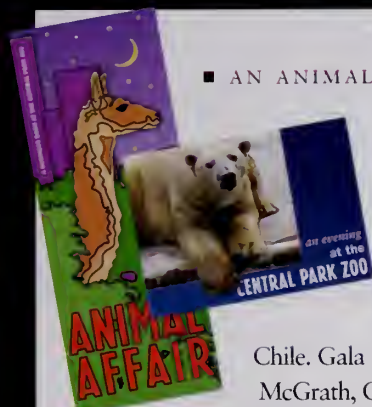
■ **DINNER ON THE SEA,** held on the glasstop Bateaux New York on September 14, honored Vikki Spruill, President of SeaWeb. This page, clockwise from top left: Warren Schwerin, WCS Trustee Virginia Schwerin, WCS Trustee Joyce Moss, George Moss; WCS Trustee, New York Aquarium Committee Chair, and Event Co-Chair Brian Heidtke and Darlene Heidtke; Brian Heidtke, Vikki Spruill, Aquarium Director Paul Boyle, and Steve Sanderson; WCS Trustee Ward W. Woods and Priscilla Woods; Donald Zucker and WCS Trustee Barbara Zucker.



# wcs events







■ AN ANIMAL AFFAIR: A BUSINESS BASH, at Central Park Zoo. Held on October 13, the Business Bash honored Goldman, Sachs & Co. for their gift to WCS of over 680,000 acres to ensure conservation in

Chile. Gala Co-Chairs were Eugene R. McGrath, Chairman and CEO of Con

Edison, and Ward W. Woods, Founding Partner,

Bessemer Securities Corporation. Opposite, clockwise from top left: WCS Trustee and Gala Co-Chair Eugene McGrath, Schering-Plough CEO Fred Hassan, Goldman Sachs and Co. Chairman and CEO Henry M. Paulson, Jr., WCS Advisor Merritt Paulson, Wendy Paulson; Congressman Elliott Engel, WCS Trustee and Gala Co-Chair Ward W. Woods; WCS Trustee Jonathan Cohen, Goldman Sachs & Co.'s John F. W. Rogers; Henry Paulson, WCS President and CEO Steven E. Sanderson; Goldman Sachs & Co.'s Brad Gillman, Larry Linden, Henry Paulson, Bob Christie; Curator of Mammals Pat Thomas, Brad Gillman, Eliane Gillman; Katy McCormick, Goldman Sachs & Co.'s Eileen White, Nature Conservancy President Steve McCormick; David T. Schiff, WCS Trustee Howard Phipps, Allison Morrow.

■ AN EVENING AT CENTRAL PARK ZOO, hosted by the Conservation Council, chaired by Stephanie Borynack, Adair Byers, Lauren Kisner, was held on June 17. This page, clockwise from top: Barbara Stowe, Co-Chair Adair Byers; Co-Chair Lauren Kisner, Council Member Daniel Barnosky; John Blondel, Co-Chair Stephanie Borynack, Council Member Blair Endresen; Volckert VanReeseema, Olivia Pirovano, Peter Manice, Melissa Berkelhammer; Kerith Davies, Council Member Christopher Manice, Sarah Gregg, Amanda Meigher.





At Dinner on the Sea: Hank Lowenstein, WCS Trustees Edith McBean and Ward W. Woods, and Priscilla Woods

## Lifetime Giving

### BEST FRIENDS (Cumulative lifetime gifts of \$1 million or more)

Mr. and Mrs. Rand V. Araskog  
Mrs. Vincent Astor  
George F. Baker III  
Mr. and Mrs. Frederick W. Beinecke  
Eleanor Briggs  
Guy Cary  
C. Diane Christensen and  
Jean Pierret  
Liz Claiborne and Art Ortenberg  
Mr. and Mrs. J. Michael Cline  
Mr. and Mrs. Edgar M. Cullman  
Mr.\* and Mrs. Charles A. Dana, Jr.  
Mr. and Mrs. John Elliott, Jr.  
Mr. and Mrs. Gary C. Fink  
Tina and William E. Flaherty  
Enid A. Haupt  
John R. Hearst, Jr.  
Mr. and Mrs. Brian J. Heidtke  
The Irwin Family  
Betty Wold Johnson and  
Douglas F. Bushnell  
Mr.\* and Mrs. Harry V. Keefe, Jr.  
LAW Fund  
Mr.\* and Mrs. Frank Y. Larkin  
Mr. and Mrs. Martin Lipton  
William B. Lloyd  
Edith McBean  
Gordon and Betty Moore  
Drs. Martin Nash and Jack Hennigan  
The Nichols Family

Anne L. Pattee  
Mr. and Mrs. Gordon B. Pattee  
Mr.\* and Mrs. Milton Petrie  
The Perkin Family  
Josie and Julian Robertson  
\*Laurance S. Rockefeller  
Susan and Jack Rudin  
The Schiff Family  
Virginia and Warren Schwerin  
Mr. and Mrs. Michael Steinhart  
Allison and Leonard Stern  
Dr. Judith P. Sulzberger  
The Families of Laurence A. and  
Preston R. Tisch  
Joan O. L. Tweedy  
Sue Erpf Van de Bovenkamp  
Robert W. Wilson  
1 anonymous donor  
\*deceased

### FOUNDATIONS (Cumulative gifts since 1998 of \$1 million or more)

The Bodman Foundation  
The Christensen Fund  
Liz Claiborne/Art Ortenberg  
Foundation  
The Walt Disney Company  
Foundation  
Charles Hayden Foundation  
William Randolph Hearst  
Foundation  
Robert Wood Johnson Jr.  
Charitable Trust  
John D. and Catherine T.  
MacArthur Foundation

Gordon and Betty Moore  
Foundation  
National Fish and Wildlife  
Foundation and ExxonMobil  
Save The Tiger Fund  
Stavros S. Niarchos Foundation  
Edward John Noble Foundation, Inc.  
David and Lucile Packard  
Foundation  
The Howard Phipps Foundation  
Robertson Foundation  
The Derald H. Ruttenberg  
Foundation  
The Starr Foundation

### BENEFACTORS (Cumulative lifetime gifts of \$250,000 to \$999,999)

Mr.\* and Mrs. Russell B. Aiken  
Jason and Susannah Berger  
Stanley and Pamela Chais  
Jonathan L. Cohen  
Joyce Cowin  
Mrs. John Culbertson  
Elizabeth Freed/  
The Freed Foundation  
Dr. and Mrs. Henry Clay Frick II  
\*Mrs. Roswell Gilpatric  
Mr. and Mrs. Robert G. Goelet  
Mr. and Mrs. Bradley L. Goldberg  
Paul A. Gould  
Kathy and Alan Greenberg  
Mr. and Mrs. Alexander S. Haig  
Judith Hamilton  
Elyssa Kellerman  
Mr. and Mrs. George K. Moss

Katharina Otto-Bernstein  
Kay and George Schaller  
Mr. and Mrs. Binkley Shorts  
Caroline N. Sidnam  
Mr.\* and Mrs. Howard Sloane  
Sally and Julius Smolen  
Foundation, Inc.  
Mr. and Mrs. Eugene V. Thaw  
Daniel K. Thorne  
Pamela M. Thye  
Mr. and Mrs. Thomas Unterberg  
Susan Lyall and Hans P. Utsch  
Jonathan P. Vannini  
Mr. and Mrs. Alan N. Weeden  
Robert Winthrop  
Ward W. and Priscilla B. Woods  
Barbara and Donald Zucker  
5 anonymous donors  
\*deceased

## Contributions, Pledges, and Payments on Pledges

**LEADERSHIP CIRCLE**  
(Annual gifts from individuals and  
foundations of \$100,000 and above)  
21st Century Tiger  
Nancy Abraham and Arnold Moss  
Mr. and Mrs. Frederick W. Beinecke  
The Bodman Foundation  
Eleanor Briggs  
Guy Cary  
The Christensen Fund  
Liz Claiborne/Art Ortenberg Foundation



Mr. and Mrs. J. Michael Cline  
 Conservation International - Critical  
 Ecosystem Partnership Fund  
 Conservation International -  
 Global Conservation Fund  
 Jonathan L. Cohen  
 Laura Moore Cunningham  
 Foundation  
 New York Community Trust-  
 William E. Flaherty Family Fund  
 Mr. and Mrs. Robert G. Goelet  
 Richard and Rhoda Goldman Fund  
 Horace W. Goldsmith Foundation  
 Enid A. Haupt  
 Charles Hayden Foundation  
 Mr. and Mrs. Brian J. Heidtke  
 The Hess Foundation, Inc.  
 Howard Hughes Medical Institute  
 International Union for the  
 Conservation of Nature  
 The Irwin Family  
 Robert Wood Johnson 1962  
 Charitable Trust  
 Robert Wood Johnson Jr.  
 Charitable Trust  
 The John D. and Catherine T.  
 MacArthur Foundation  
 Edith McBean  
 Gordon and Betty Moore  
 Foundation  
 National Fish and Wildlife  
 Foundation and ExxonMobil  
 Save the Tiger  
 National Geographic Society  
 The New York Community Trust  
 Stavros S. Niarchos Foundation  
 Edward John Noble Foundation, Inc.  
 Katharina Otto-Bernstein  
 The David and Lucile Packard  
 Foundation  
 The Pew Charitable Trusts  
 Pew Fellows Program in  
 Marine Conservation  
 The Howard Phipps Foundation  
 Robertson Foundation  
 Susan and Jack Rudin  
 Saddle Foundation  
 The Schiff Foundation  
 Virginia and Warren Schwerin  
 Caroline N. Sidnam  
 The Sperry Fund  
 The Starr Foundation  
 Allison and Leonard Stern  
 Pamela M. Thye  
 The Tinker Foundation, Inc.  
 Andrew H. and Ann R. Tisch  
 Foundation  
 Joan O. L. Tweedy  
 Wilburforce Foundation  
 Robert W. Wilson  
 Ward W. and Priscilla B. Woods  
 World Wildlife Fund  
 Zoo Zürich  
 2 anonymous donors

#### CHAIRMAN'S CIRCLE

(Annual gifts from individuals and  
 foundations of \$25,000 to \$99,999)  
 American Museum of Natural History,  
 Center for Biodiversity and  
 Conservation  
 The Argosy Foundation  
 Cynthia and Ronald Beck  
 Beneficia Foundation

Rodney B. Berens  
 The Bobolink Foundation  
 Mr. and Mrs. Harvey Bookman  
 British Consulate General  
 The Howard G. Buffett Foundation  
 The Bullitt Foundation  
 The Louis Calder Foundation  
 Chais Family Foundation  
 Sarah K. de Coizart Article TENTH  
 Perpetual Charitable Trust  
 Geraldine R. Dodge Foundation  
 Peter R. and Katherine L. Dolan  
 Strachan Donnelley, Ph.D.  
 Michel Andre Durand  
 Earth Share/Environmental  
 Federation of America  
 Earthwatch  
 Edwards Mother Earth Foundation  
 Mr. and Mrs. Laurence D. Fink  
 The Freed Foundation, Inc.  
 Helen Clay Frick Foundation  
 Peter R. Gimbel and Elga Andersen-  
 Gimbel Memorial Trust  
 Francis Goelet Foundation  
 Mr. and Mrs. Bradley L. Goldberg  
 Paul A. Gould  
 The Marc Haas Foundation  
 Judith Hamilton  
 New York City Environmental Fund  
 of the Hudson River Foundation  
 The Jeniam Foundation  
 Mr. and Mrs. James M. Large, Jr.  
 Lawrence & Dana Linden Family  
 Foundation  
 The Lipton Foundation  
 William B. Lloyd  
 Margot Marsh Biodiversity  
 Foundation  
 McBean Family Foundation  
 Mr. and Mrs. Richard Miller  
 Mr. and Mrs. George K. Moss  
 National Center For Ecological  
 Analysis and Synthesis  
 National Fish and Wildlife  
 Foundation  
 Mr. and Mrs. Carl A. Navarre, Jr.  
 Laura J. Niles Foundation, Inc.  
 Mr. and Mrs. Raj K. Nooyi  
 The Maria Gans Norbury  
 Fund for Animals  
 D. B. O'Connor  
 Oak Foundation USA  
 The Overbrook Foundation  
 The Perkin Fund  
 Mr. and Mrs. E. John Rosenwald, Jr.  
 Derald H. Ruttenberg Foundation  
 The Schlenger Foundation  
 Walter and Jeanne Sedgwick  
 Mr. and Mrs. Richard M. Sheridan  
 Smithsonian Institution  
 Mr. and Mrs. Michael Steinhardt  
 The Summit Foundation  
 Daniel K. Thorne Foundation, Inc.  
 Tigris Foundation  
 Trust For Mutual Understanding  
 Turner Foundation, Inc.  
 United Nations Educational  
 Scientific Cultural Organization  
 Mr. and Mrs. Thomas Unterberg  
 Susan Lyall and Hans P. Utsch  
 The G. Unger Vetlesen Foundation  
 Dr. Lucy R. Waletzky  
 Wallis Foundation  
 The Wellcome Trust

Westchester Community  
 Foundation  
 Whale and Dolphin Conservation  
 Society  
 The Norman and Rosita Winston  
 Foundation, Inc.  
 Mr. and Mrs. Samuel H. Wolcott III  
 The Yosemite Foundation  
 Barbara and Donald Zucker  
 4 anonymous donors

#### PRESIDENT'S CIRCLE

(Annual gifts from individuals and  
 foundations of \$10,000 to \$24,999)  
 Joseph and Sophia Abeles  
 Foundation, Inc.  
 Louis and Anne Abrons  
 Foundation, Inc.  
 The Achelis Foundation  
 Adirondack North Country  
 Association  
 Alertis  
 American Conservation Association  
 American Zoo and Aquarium  
 Association - Crocodilian  
 Advisory Group  
 American Zoo and Aquarium  
 Association, Conservation  
 Endowment Fund  
 Carl B. Anderson III  
 Mr. and Mrs. Frank J. Avellino  
 Avocet Charitable Lead Unitrust  
 The Baobab Fund  
 The Theodore H. Barth  
 Foundation, Inc.  
 Jeffrey L. Berenson  
 Clifford N. Burnstein and  
 Sabra Turnbull  
 Gilbert and Ildiko Butler  
 Foundation  
 Dr. Irene Cannon-Geary  
 Cheryl Chip  
 Gladys G. Cofrin Fund  
 Madeleine and Jerry Cohen  
 Community Foundation of  
 Jackson Hole  
 Conservation International  
 Bobbie Crosby  
 Lucy C. Danziger  
 Dorothy R. Donnelley Charitable Trust  
 Mr. and Mrs. Stephen Dow  
 Earth Friends  
 Mr. and Mrs. John Elliott, Jr.  
 The Lincoln Ellsworth Foundation  
 The Emerald Foundation  
 The Robert G. and Jane V. Engel  
 Foundation, Inc.  
 Judy and David Epstein  
 Armand G. Erpf Fund  
 F. & J. S. Fund, Inc.  
 Mr. and Mrs. Gary C. Fink  
 Mr. and Mrs. Richard Flintoft  
 Candace and John Frawley  
 Charles Fritz III  
 Joseph and Jane Fraser Fulcher  
 Peter M. Graham  
 Jonathan D. Green  
 The Stewart and Constance  
 Greenfield Foundation  
 Mary Livingston Griggs and  
 Mary Griggs Burke Foundation  
 Hagedorn Fund  
 Gladys and Roland Harriman  
 Foundation

The Henry Foundation, Inc.  
 Mr. and Mrs. Norman Hinerfeld  
 International Elephant Foundation  
 The Kanbar Charitable Trust  
 Robert S. Kaplan  
 Mr. and Mrs. Robert W. Kean, Jr.  
 Mrs. Harry V. Keefe, Jr.  
 Margaret Kinnaird and  
 Timothy O'Brien  
 Lady Kinnoull's Trusts  
 F.M. Kirby Foundation, Inc.  
 Barbara and Michael Kowalski  
 LSR Fund  
 Elaine and Kenneth Langone  
 Rose-Marie and Dick Lewent  
 GC and JW Lodge Fund  
 Leon Lowenstein Foundation, Inc.  
 The Michael Lynch and  
 Susan Baker Foundation  
 Mr. and Mrs. Eugene R. McGrath  
 Dr. and Mrs. Robert Mercer  
 Mr. and Mrs. Sam Scott Miller  
 Angela and Howard Mithal  
 Montefiore Medical Center  
 The Moriah Fund  
 Henry and Lucy Moses Fund, Inc.  
 Vikram Nagaraj  
 Drs. Martin Nash and  
 Jack Hennigan  
 Natural History Museum of the  
 Adirondacks  
 The Nature Conservancy  
 New England Biolabs Foundation  
 Nichols Foundation, Inc., in  
 memory of Charles W. Nichols  
 Oak Lodge Foundation  
 Ocean Park Conservation  
 Foundation  
 The Panaphil Foundation  
 Betty Parsons Foundation  
 Mr. and Mrs. Jeffrey R. Peltier  
 Vivian and Stanley Picheny  
 Plant Family Environmental  
 Foundation  
 Generoso Pope Foundation  
 The Christopher Reynolds  
 Foundation  
 Jonathan Rinehart  
 \*Laurance S. Rockefeller  
 Michael and Irene Ross  
 Elmina B. Sewall Foundation  
 Shared Earth Foundation  
 Felice K. Shea  
 The Sidney, Milton and  
 Leoma Simon Foundation  
 Mr. and Mrs. Joseph R. Siphron  
 Mrs. Virginia Sloane  
 Ruth Smart Foundation  
 Denise R. Sobel and  
 Norman K. Keller  
 Beverly Spector and Ken Lipson  
 The Stebbins Fund  
 Robert K. Steel Family Foundation  
 Sylvanus Charitable Trust  
 Tapeats Foundation  
 Tides Foundation  
 United Way of New York City  
 University of Alabama at  
 Birmingham  
 Kathryn F. Wagner  
 Alexander H. Watson  
 Mr. and Mrs. Alan N. Weeden  
 The John L. and Sue Ann Weinberg  
 Foundation



WCS Trustee Julian and Josie Robertson

W. Larry Westbrook  
Mr. and Mrs. Charles L. Wilson III  
Mr. and Mrs. E. Lisk Wyckoff, Jr.  
1 anonymous donor  
\* deceased

## CURATOR'S CIRCLE

(Annual gifts from individuals and foundations of \$5,000 to \$9,999)

African Wildlife Foundation  
Mr. and Mrs. Jerome V. Ansel  
The Howard Bayne Fund  
Mr. and Mrs. Michael W. Bealmear  
Dr. and Mrs. Joel Berger  
Mrs. Therese Bianco  
Brevard Zoo  
Mr. and Mrs. W. L. Lyons Brown, Jr.  
H.W. Buckner Charitable  
Residuary Trust  
Julia Carpenter  
The Center for Environmental  
Research and Conservation  
The Chase Wildlife Foundation  
Yvon Chouinard  
Clermont Charitable Trust  
Mrs. Robert Scott Collins  
The Cowles Charitable Trust  
Dallas Safari Club  
Mrs. Charles A. Dana, Jr.  
Cleveland H. Dodge  
Foundation, Inc.  
The Donohue Family Foundation  
The Caleb C. and Julia W. Dula  
Educational and Charitable  
Foundation  
Blanche T. Enders Charitable Trust  
Katherine G. Frase and  
Kevin McAuliffe

Alexandra G. Goelet  
The Goldring Family Foundation  
Dr. Laurie R. Goldstein  
Kent Greenawald and Nancy Mack  
The Grodzins Fund  
Jo Anne and Robert C. Hacker  
John J. Hagenbuch  
Caroline H. Hall  
Mary W. Harriman Foundation  
Mr. and Mrs. Kevin Harvey  
Karen Haycox-Eltrich  
Andrew and Jody Heyward  
Mr. and Mrs. Frank W. Hoch  
Hoch 2003 Charitable Lead Trust  
Deirdre and Christopher Hockett  
Mr. and Mrs. John H. Hollar  
Richard Holmstrom and  
Kate Ridgway  
Wende and Tom Hutton  
International Association For Bear  
Research and Management  
The International Foundation  
Mr. and Mrs. Edgar E. Jackson  
The JM Foundation  
Mr. and Mrs. Paul T. Jones II  
Karen A. and Kevin W. Kennedy  
Foundation  
The Walter C. Klein Foundation  
The Ruth and Seymour Klein  
Foundation, Inc.  
Richard P. Krasnow and  
Nancy Meyrich  
Mr. and Mrs. Alexander Laughlin  
The Lautenberg Foundation  
Mr. and Mrs. Steven Lear  
Mr. Jordan A. Lewis  
Steven Littman and Diane Tarbell  
Carolyn Lloyd-Cohen

James J. and Marianne B. Lowrey  
Foundation  
Jennifer C. Maitland  
Ann and John H. Manice  
Mr. and Mrs. Peter Manigault  
Marble Fund  
Mr. and Mrs. Roman Martinez IV  
Mr. William B. McClatchy  
Mr. and Mrs. Howard McMorris II  
Messengers of Healing Winds  
Foundation  
John D. Mitchell  
Monterey Fund  
National Aquarium in Baltimore  
North of England Zoological  
Society  
Mr. and Mrs. Howard Oestreich  
Quadra Foundation, Inc.  
Katharine A. Ray  
Mr. and Mrs. J. Stanley Reeve  
Deborah A. Reich  
Mary H. Rumsey Foundation  
Dorothy K. Rupp  
Safari Club International  
Foundation  
Sand County Foundation  
Mr. Walter J. Schloss  
Mr. and Mrs. Stephen R. Seiter  
Mr. and Mrs. Eric P. Sheinberg  
Mr. and Mrs. Binkley C. Shorts  
The Paul Singer Family Foundation  
Arthur and Henrietta A. Sorin  
Charitable Trust  
Bernard & Anne Spitzer  
Charitable Trust  
John M. Stephenson  
Mr. and Mrs. John Stevenson  
Sweet Water Trust

Jeffrey Taschler and Dina Treanor  
The Ruth and Vernon Taylor  
Foundation  
Eugene V. and Clare E. Thaw  
Charitable Trust  
The Toronto Zoo  
Kathryn F. Wagner  
Mr. and Mrs. Richard Witten  
1 anonymous donor

## INDIVIDUAL AND FOUNDATION DONORS

(Annual gifts of \$1,000 to \$4,999)

Mr. and Mrs. Wayne Albinder  
Jane Alexander and Edward Sherin  
The Aloha Fund of the Marin  
Community Foundation  
American Conservation and  
Education Society  
American Pheasant and  
Waterfowl Society, Inc.  
American Society of Primatologist  
Conservation Fund  
Mr. and Mrs. Christopher Ankner  
Mr. and Mrs. Alan Ascher  
Mr. and Mrs. E. Nelson Asiel  
Dr. Janet Asimov  
Norma Asnes  
Patricia I. Avery  
Mr. and Mrs. Jerry Ball  
Candace and Michael Barasch  
Lillian and Maurice Barbash  
Lorraine W. Bardsley  
Sandra Atlas Bass  
Mr. and Mrs. Richard Bastoni  
Mr. and Mrs. Robert Bateman  
Mr. and Mrs. F. Harlan Batrus  
Perry S. Bechky and Sirina Tsai



John C. Beck  
 Garrard Beene and Evan Mason  
 Jayne G. and Harvey Beker  
 The Robert A. and Renee E. Belfer Family Foundation  
 Honorable Lucy Wilson Benson  
 Mr. and Mrs. Bruce Bent  
 Ann and Joe Berkman  
 Mr. and Mrs. Mortimer Berkowitz III  
 Mr. and Mrs. Richard Bernstein  
 Mr. and Mrs. John C. Bierwirth  
 The Albert and Lin Bildner Foundation  
 Marilyn and Ira Birnbaum  
 Laura and Lloyd Blankfein  
 Lois D. Blumenfeld  
 Board of Cooperative Educational Services  
 Boone and Crockett Club  
 Matthew F. Bostock  
 Magdaline Boyer  
 Mr. and Mrs. John Briedis  
 Ron and Susan Briggs  
 Brodsky Charitable Foundation  
 Bruce Brownstein  
 Mrs. Donald Bruckmann  
 Marilyn Bruneau  
 Mr. and Mrs. Michael J. Bucuvalas  
 Rev. and Mrs. C. Frederick Buechner  
 Maynard P. and Katherine Z. Buehler Foundation  
 Mr. and Mrs. James E. Burke  
 Glenda and John Burkhart  
 Mr. and Mrs. Willard C. Butcher  
 David Butler  
 Merrily Butler  
 Mr. and Mrs. Samuel C. Butler  
 Mrs. Brook H. Byers  
 C.A.L. Foundation, Inc.  
 Ann and Donald Calder  
 Mr. and Mrs. Charles W. Calomiris  
 Barbara I. and Walter W. Carey  
 Mr. and Mrs. Tom R. Casselman  
 Catharine L. Cathay  
 Mr. and Mrs. John Cederholm  
 Ida and Stanley Chamberlin  
 Reverend and Mrs. Alfred D. Chandler  
 Mr. and Mrs. Tylis Y. Chang  
 Percilla A. L. Chappell  
 Charina Foundation, Inc.  
 Mrs. Thomas H. Choate  
 Jane K. Clark  
 Mr. and Mrs. Jonathan C. Clay  
 Jane E. Clifford  
 Bruce E. Cobern  
 Mr. and Mrs. Jon C. Coe  
 Colleen H. Coghlan  
 Mr. and Mrs. Harvey M. Cohen  
 Joseph F. Coleman  
 The Coleman Foundation  
 Mr. and Mrs. Mark Colen  
 Mary C. Collins  
 P & C Collins Fund  
 Vivian and Howard Colson  
 CONAF  
 Dr. and Mrs. William G. Conway  
 Mr. and Mrs. David E. Coquillette  
 Mr. and Mrs. Juan E. Corradi  
 The Arthur & Elena Court Nature Watch Conservancy  
 Mr. and Mrs. Horace I. Crary, Jr.  
 Louise B. & Edgar M. Cullman Foundation  
 Constans Culver Foundation  
 The Nathan Cummings Foundation

Catherine G. Curran  
 Anne G. Curtis  
 Dr. Anne McB. Curtis  
 The Dammann Fund, Inc.  
 Mr. and Mrs. Stephen S. Daniel  
 J. R. Davey  
 George Davidson and Eileen Glynn  
 Mr. and Mrs. Alfred C. DeCrane, Jr.  
 Michael and Susan Delaney  
 Richard DeMartini and Jennifer L. Brorsen  
 Marie G. Dennett Foundation  
 Jean Denoyer and Diane Marshall  
 Denise and Sam DeRosa-Farag  
 William E. Derrenbacher  
 Mr. and Mrs. Colin Devine  
 Mr. and Mrs. Martin Diamond  
 The Dillon Fund  
 Mrs. Del Donati  
 Andre and Molly Donikian  
 Mr. and Mrs. David A. Downing  
 JRS Dryfoos Charitable Lead Trust  
 The Doris Duke Foundation  
 Ralph and Laura Durso Foundation  
 Mr. and Mrs. Jonathan B. Eddy  
 Blair W. and Cheryl Cohen Efron  
 Mr. and Mrs. David A. Egan  
 Benjamin R. Eisenberg and Laurie Anderson  
 Leigh Ekstein and Dana L. Telsey  
 Elephant Rock Foundation, Inc.  
 Judith Elkin and Ralph Carabetta  
 Louise H. Emmons  
 Carl D. Emont and Eve J. Mansch  
 Blair A. England and Peter H. Carlin  
 Gale Epstein  
 Charles and Sylvia Erhart  
 Mr. and Mrs. Robert Esnard  
 Stephanie A. Evans  
 Richard and Cecilia Fabbro  
 Fritz Fahrni  
 The Fanwood Foundation  
 Perry Farrell  
 Robert Filer  
 Mr. and Mrs. Douglas C. Fischer  
 Mr. and Mrs. Baruch Fischhoff  
 John J. Flemm Foundation, Inc.  
 Mr. and Mrs. James Flood  
 Flora Family Foundation  
 The Ford Foundation  
 The Forrest Family Fund  
 Ernst and Elfriede Frank Foundation  
 Kay and Stephen Frankfurt  
 Mr. and Mrs. Johannes Fritze  
 Nathan D. and Joyce Froot  
 Fuller Foundation  
 The Gage Fund Inc.  
 Gregory Garmant  
 Seymour L. and Phyllis H. Gartenberg  
 Mr. and Mrs. Mark T. Gates, Jr.  
 Dr. Murray Gell-Mann  
 Mr. and Mrs. William Gibbons  
 Lovelle Gibson  
 Joshua Ginsberg and Catherine Kerr  
 Linda E. Gladstone  
 Elizabeth B. Glassco Living Trust  
 Bradd J. Gold  
 Golden Family Foundation  
 Karen L. Goldmark and Andrew Pernambuco  
 Katherine L. Goolsby  
 Elizabeth T. Gray  
 Jane Greenleaf  
 Mr. and Mrs. Mark Grier

Mr. and Mrs. Daniel Griffin  
 James H. Griffin  
 Mr. and Mrs. Benjamin A. Groves  
 Antonia and George J. Grumbach, Jr.  
 Winston Guest  
 Janice P. Haggerty  
 Mr. and Mrs. Frank J. Hallowell  
 Stephanie Halpin and Anthony Uzzo  
 Helen Leale Harper, Jr.  
 Mr. and Mrs. George Harnngton  
 Mr. and Mrs. Curtis A. Harris  
 Mr. and Mrs. William Harris, Jr.  
 Mrs. James Harvey  
 Mr. and Mrs. David Hathaway  
 Joyce J. Hatter  
 James N. Hauslein  
 Hawthorne Lane Fund  
 Lynne Hayden-Findlay  
 Mr. and Mrs. John R. Hearst, Jr.  
 Mr. and Mrs. Harvard K. Hecker  
 The Heilbrunn Foundation  
 Mr. and Mrs. John D. Hellier  
 Jackie and Keith Hennessey  
 Mr. and Mrs. Harry B. Henshel  
 Jennifer Herring  
 Henry L. Heymann  
 Joy R. Hilliard  
 Steven and Jane Hoch  
 Jacqueline Hoefler Fund  
 Natalie D. and Josep Hofheimer  
 Philanthropic Fund  
 Adam Hogg  
 Mr. and Mrs. Michael J. Horvitz  
 Helen and Howard House Family Foundation  
 Howat Family Foundation  
 Marie C. Hubbard  
 Hans P. Huber  
 Mr. and Mrs. Michael A. Huber  
 Humane Society of the United States  
 Mr. Richard L. Hymes  
 O'Donnell Iselin Foundation  
 The Edith B. and Lee V. Jacobs Fund No. 1  
 C. Bruce Johnstone  
 G. Bradford Jones and Joan Hood Jones Fund  
 Judith M. Joy  
 Jennifer and Frederick Kaden  
 Richard Kandel  
 Pat and Paul D. Kaplan  
 Dr. Scott Karlene  
 Mr. and Mrs. John E. Karlin  
 John Kauffman  
 Anna-Maria and Stephen Kellen Foundation  
 Mr. and Mrs. Henry Kibel  
 Johanna Kilbourn  
 The Kingsberg Foundation  
 Dr. and Mrs. Michael G. Kirsch  
 Gail Ann Kizner and Alexander Joseph Kizner Meech  
 Mrs. Elysabeth Kleinhans  
 Jodi and Keith Kleinick  
 Mr. and Mrs. Werner H. Kramarsky  
 Marian I. Krauss  
 Mr. and Mrs. Robert Kruger  
 Carol and Michael Kurtz  
 The Lack Family Fund  
 Laimbeer Family Gift Fund  
 Lakeside Foundation  
 Diana and John Lamb  
 Benjamin V. and Linda L. Lambert Fund

Elise S. Lapham  
 Robert J. Laskowski Foundation  
 Mr. and Mrs. Leonard A. Lauder  
 Dorothea Lawson  
 Susan and Steven Lax  
 Sylvie Le Blancq and Robert Krauss  
 David and Laurie Zucker Lederman  
 Lemar Leland  
 Richard and Gabrielle Lesser  
 Kathleen Lingo  
 Mr. and Mrs. Allan W. Linke  
 Thomas and Amanda Lister  
 Lorna M. Livingston  
 Randy and Lori Livingston  
 Charitable Gift Trust  
 The Arthur Loeb Foundation  
 Jeanette and Peter Loeb  
 Lostand Foundation, Inc.  
 Henry A. Lowenstein  
 Michelle and Craig H. Loweth  
 Mr. and Mrs. George T. Lowy  
 Mr. and Mrs. Dan W. Lufkin  
 Elise Goldschlag and Kevin L. Lundeen  
 Mr. and Mrs. William E. Lunt  
 Johnson S. McKelvy and Janice M. MacAvoy  
 Mr. and Mrs. Copeland MacClintock  
 James A. MacDonald Foundation  
 Deborah and Andrew Madoff Foundation  
 Mr. and Mrs. Peter L. Malkin  
 Ruth Manary Advised Fund  
 Mrs. Frits Markus  
 Mr. and Mrs. David S. Martin  
 Michael and Jean Martin  
 Mr. and Mrs. R. C. Marvel  
 Maria and Nick Masciotti  
 Mr. and Mrs. T. Michael Mather  
 Alyce K. Matsumoto  
 Helen Martin  
 Dolly and Charles Mayer, Jr.  
 Mayer Family Foundation  
 Ryan M. Maynard  
 Annin D. McAlpine  
 John and Nancy McCaffrey  
 John and Constance McGillicuddy  
 Mr. and Mrs. Frank McGinnis  
 Mr. and Mrs. Christian McIntosh  
 Emily B. McKay  
 Martha B. McLanahan  
 H. Roemer and Constance McPhee  
 Mr. and Mrs. John McQuillan  
 Dr. and Mrs. Mark Meadow  
 Memorial Elementary School  
 Mrs. Annette Merle-Smith  
 Mr. and Mrs. Louis J. Mezzina  
 Mr. and Mrs. Brian R. Michael  
 Dr. and Mrs. Irwin W. Mindell  
 Mr. and Mrs. Sylvester Minitier IV  
 Sara and William Mittler Foundation  
 Mnuchin Foundation  
 Barbara Winkler-Monsanto and Enrique Monsanto  
 Ann L. Morfogen  
 Daniel Moros and Ann W. Schongalla  
 Mr. and Mrs. Lester S. Morse, Jr.  
 Morton Family Foundation  
 Mr. and Mrs. Charles H. Mott  
 Rosemary A. Moukad  
 Tom Mudd  
 David Gottlieb and Stephanie Mudick



Trustee James W. Large, Jr., wields a device that allows imprinting of identification numbers on elephant seals, from a safe distance.

Cathryn L. Mueller  
Amy J. Munich  
Elizabeth P. Munson and  
Robert L. von Stade  
Mr. and Mrs. Leonard Muse  
Belle and Murray Nathan  
Philanthropic Fund  
Marian Naumburg  
Mr. and Mrs. Arun Nayar  
Mr. and Mrs. Roy R. Neuberger  
New England Aquarium  
Joanne Woodward and  
Paul L. Newman  
Roy Newman  
Ellen and Walt Newsom  
Cesar Nillaga  
James C. Nolan and Yumiko Inoue  
Mr. and Mrs. Wilson Nolen  
The Norcross Wildlife  
Foundation, Inc.  
Drs. Ralph and  
Jadviga Da Costa Nuñez  
Edward O'Gorman  
Abby and George O'Neill Trust  
Terence J. O'Reilly  
Mr. and Mrs. Edwin N. Ordway, Jr.  
Mr. and Mrs. Gilman Ordway

Orentreich Family Foundation  
Karen and Robert Osborne  
Mr. and Mrs. Nicholas Osborne  
Catherine Palmer and  
Patricia Pileggi  
Mr. and Mrs. Andrew Panelli  
Mr. and Mrs. John P. Parise  
Patricia B. Park  
Ms. Peggy Parry  
Moses L. Parshelsky Foundation  
Dr. and Mrs. Andrew H. Patterson  
Jacqueline Pearlman  
Mr. and Mrs. John R. Peckham  
Mr. and Mrs. E. Lee Perry  
\*Frederick D. Petrie  
Cynthia Phipps  
Mr. and Mrs. George D. Phipps  
Nancy and Frank Pierson  
Robert Pilkington  
Michael J. Piuze  
Ann C. Poll  
Mr. and Mrs. Russell H. Pollack  
Nancy B. Poor  
Sumati and Vasant Prabhu  
Mr. and Mrs. Stephen C. Pratt  
Sophia B. Primps  
Project AWARE Foundation

Linda Rands  
Mr. and Mrs. Adam Reeder  
Mr. and Mrs. James S. Regan  
H. Reisman Charitable Trust  
Resources Legacy Fund  
Mrs. William C. Ridgway, Jr.  
Riptide Fund  
Amy and Larry Robbins  
Jack A. Robbins  
David Rockefeller  
Wendy and Larry Rockefeller  
Nelson A. Rockefeller, Jr.  
Susan and Lonny Romano  
Abigail Rome  
Mr. and Mrs. Theodore Roosevelt IV  
Mrs. Sandra Rose  
Rosenthal Fund  
Mr. and Mrs. Axel G. Rosin  
Richard W. Ross  
Rotonda Foundation  
Ellen and Ronald Roxby  
Valerie and Michael Rozen  
Mr. and Mrs. Stephen T. Rubinstein  
Jeffrey A. Sachs  
Sandy and Alan B. Sadwin  
Stuart M. Salenger  
Barbara Saltzman Charitable Foundation

Hiram Samel  
San Antonio Zoological Society  
Steven and Rosalie Sanderson  
Mr. and Mrs. Scott Schiff  
Edward D. Schmidt  
Ms. Carrie L. Schnelker  
Carole Schragis  
Donna and Steven Schragis  
Gary L. Schragis  
John Schumacher and Albert Nicol  
Catherine J. and Brian P. Schwartz  
Harry Schwartz Foundation  
City of Seattle  
Peter J. Sellon 1997  
Charitable Lead Trust  
The Seva Foundation  
Nancy Shane  
Natalie and Howard Shawn  
Neal and Jacqueline Shear  
Mr. and Mrs. Steven R. Sheck  
Carol and Stephen Shey  
Fredric A. Silberman and  
Sharon Kim Siegfriedt  
Jeffrey and Andrea Silver  
Erron Silverstein  
Alexander B. Slater  
James C. and Tammy M. Smith



Kenneth L. Smith and Lucia Christopher  
Dr. Marjorie Smith  
Richard E. Snyder and  
Laura Yorke Snyder  
Susan Sollins  
Robert L. Spehar  
Mr. and Mrs. John Spencer  
St. Andrew's College  
Alfred T. Stanley Foundation  
Mr. and Mrs. Oliver K. Stanton  
Mr. and Mrs. Peter Stearns  
Mr. and Mrs. Andrew P. Steffan  
Mr. and Mrs. Daniel H. Stern  
Emanuel and Liz Stern  
Sidney Stern Memorial Trust  
Mr. and Mrs. George Sternlieb  
John W. and Laura S. Stewart  
Foundation  
Carol Kay Stocker  
Clare C. Stone  
Stonebridge Foundation  
Ronald J. Strauss  
Mr. and Mrs. Frank A. Strohm  
Students of J. T. Henley Middle School  
The Sulzberger Foundation Inc  
Julia and Stephen Sutcliffe  
Lee and Martha Talbot  
Barbara J. Taller  
Elizabeth T. and  
Leonard M. Tannenbaum  
Nancy Taubenslag and  
Mauri Rosenthal  
Mr. and Mrs. David H. Taylor, Jr.  
Michael Teitler and Judith Katz  
Mr. and Mrs. Marvin T. Tenenbaum  
Thanksgiving Foundation  
Mrs. Stuart W. Thayer  
Margaret and Bjorn Thorbjarnarson  
The Laura L. Tiberti Charitable  
Foundation  
Toledo Zoological Society  
Mr. and Mrs. Gene Tremblay  
John and Evelyn Trevor Charitable  
Foundation  
Michael Tuch Foundation, Inc.  
Tulsa Zoo Friends, Inc.  
Jennifer Urdan  
Mrs. John A. van Beuren  
Josephine B. Vargas  
Mr. and Mrs. William A. Volkhausen  
Mrs. Jephtha H. Wade  
Howard and Anne Ward  
Anna J. Ware  
Robert J. Warshaw  
Mr. and Mrs. Peter M. Waser  
Mr. and Mrs. Christopher Waterman  
Mr. and Mrs. John W. Watkins  
Christopher Watson  
The Thomas J. Watson Foundation  
WCS's Metropolitan  
Conservation Alliance  
Bill Weber and Amy Vedder  
Mr. and Mrs. Charles Webster  
Sharon Wee and Tracy Fu  
Mr. and Mrs. Hedley M. Weeks  
Theodore and Renee Weiler  
Foundation  
Mr. and Mrs. Charles L. Weinberg  
Marshall Weinberg  
Mary Jane Weiskopf  
Lucille Werlinich  
Jill A. Westmoreland  
Whalesback Foundation  
Shelby White and Leon Levy

Mr. and Mrs. Thomas White  
Mr. and Mrs. R. H. Wilder, Jr.  
College of William and Mary  
Mr. and Mrs. William E. Willis  
Mrs. Robert C. Wilson  
Gary and Karen Winnick Family  
Foundation  
Mr. and Mrs. Frederic Winthrop, Jr.  
The Marc Wolinsky and Barry C.  
Skovgaard Foundation  
Mr. and Mrs. James H. Wykoff  
Mr. and Mrs. Robert Yoakum  
Janet B. York/Janet Stone Jones  
Foundation  
Mr. and Mrs. John R. Young  
Claire L. Zabel  
Rob Zanger  
Jeff Zitsman and Elaine Abrams  
Emily Zofnass Fund at the Boston  
Foundation  
Dr. Joan S. Zofnass  
8 anonymous donors  
\*deceased

#### **CONSERVATION PARTNERS (\$500 - \$999)**

Andreas J. Aarbo and  
Elizabeth Bohrer  
Lynn and Seth Abraham  
Steve Ackerman  
Ellen and Joseph Agresti  
Emily H. Alexander  
Sarah R. Allan  
Annette and Eric J. Altmann  
Robert Alvine and  
Joann Thompson  
America's Charities  
Richard G. Anderson  
Gwendolen M. Appleyard  
Ellen Asher  
Donna Bailey  
Rainier B. Baldauf  
Mr. and Mrs. Geoffrey Baldwin  
The James and Alvina Bartos Balog  
Foundation, Inc.  
Bank of America United Way  
L. Irvin Barnhart  
Bat Conservation International Inc.  
Miriam Bensmon  
Dr. and Mrs. M. Donald Blaufox  
Judi Rappoport and  
David M. Blitzer Fund  
Joseph Bobryk  
Mr. and Mrs. William T. Boland  
Linda and Willard Boothby  
Philippine K. Brooke  
Mr. and Mrs. William N. Bucklin III  
Jacalyn A. Kremer and  
Thomas Burgess  
Walter and Sylvia Button  
Ellen Cabot  
Eugene Callahan  
Christine Campbell and  
Sherri Faung Chen  
Mr. and Mrs. James F. Carlin  
Carolina Jaguar Club  
Warren Chang  
Mr. and Mrs. Glen Charles  
Edward Tinsley Chase  
Clara Cist  
The Clifford Family Foundation  
Charitable Trust  
H. Rodgin Cohen and  
Barbara Cohen

Columbia Middle School  
Common Cents New York, Inc.  
Commonwealth Zoological  
Corporation  
Jessie Cooper  
Mary Cronson and Caroline Cronson  
Mr. and Mrs. Ralph S. Cunningham  
Mr. and Mrs. Mark P. Curchack  
Kathy and Paul Davis  
Richard DeBates  
Anne de la Haye Jouselin  
Christopher DiAngelo and  
Lindsay Baker  
Christine Dillon  
Steven Dixon  
The Morton Donnelley Trust  
Mr. and Mrs. Scott A. Draper  
Michael Dubno  
Hamilton and Lin Emmons  
Endangered Species Club  
Margo and John Ernst  
Dana Buchman and Tom Farber  
Dawn and Joseph Figueroa  
Barbara D. Finberg  
Susan E. and Thomas K. Flanagan  
Dr. and Mrs. David R. Flatt  
Albert and Myra Fleischman  
Maria and Patrick Fleming  
Sharon H. Fong and  
James H. Wistman  
Mr. and Mrs. J. Lawrence Frank  
Christopher and Desly Movius Fryer  
Michael Fulton  
Gail Furman  
Mr. and Mrs. Robert Garber  
Mr. and Mrs. Scott L. Geller  
Kate Gessert  
Joseph and Carson Gleberman  
Mr. and Mrs. Barry W. Graham  
William F. Gratz and Jim Bruno  
Mr. and Mrs. Arthur Gregory  
John Gunther-Mohr and  
Elizabeth Wedemeyer  
Allan Harm  
J.B. and Mary G. Harreld  
The Harris Family Charitable Fund  
James E. Heflich  
Mr. and Mrs. Robert A. Hellerman  
Robert Hemstreet  
Mark Herfort  
Ara and Rachel Hovnanian  
Mr. and Mrs. James S. Hughes  
Sarah F. Hunnewell  
Steven and Alison Hussey  
Mary and David Iles  
Robert E. Isaacson  
Manuel Julio  
Noel E. Karasin  
Christian K. Keesee Advised Fund  
Bob Kempf  
Wendy and John Keryk  
Linda Kiger  
Anish Konkar  
Bruce R. Kraus  
Kathryn Krause  
Mr. and Mrs. Peter Lane  
Karen and William Lauder  
Dr. and Mrs. David E. Lawrence  
Frederick Layman  
Sandra Lazo and Donald Layton  
Paul Leff  
N. C. Lipis  
Mary A. Littauer  
Dwight E. Lowell

Henry Luce Foundation  
Andrew J. Luk  
Frances and David Magee  
Lori Ann and Anthony Mallardi  
Lola and Norman Mason  
David E. Massengill  
Mathis Pfohl Foundation  
Mr. and Mrs. Peter Matthiessen  
Mr. and Mrs. Marc O. Mayer  
Cynthia and John A. McCaffrey  
James P. McCarthy  
Eric W. McClure and Lumi Rolley  
Mr. and Mrs. Gerald M. McLoughlin  
Scott A. Mebus  
Heidi G. and Brian Miller  
Philip G. Miller  
Carol Minkin  
Mr. and Mrs. Kenneth Mooney  
Dr. and Mrs. Joel M. Moskowitz  
Manuel and Dorothy Moura  
Mr. and Mrs. Peter W. Nash II  
L.M. Newman Family Foundation  
Peter Niewiadomski  
Conrad J. Obregon  
Benjamin Olewine  
Olsen-Denson Family Fund  
Mr. and Mrs. Bruce Paisner  
Panwy Foundation, Inc.  
Andrew Paul  
Mrs. Richard T. Perkin  
Robert A. Petersen  
The Pingree School  
Polar Bear Club USA, Inc.  
Mercedes C. Puga  
Bayard D. Rea  
Mr. and Mrs. Mark H. Reed  
Ronald and Elizabeth Reede  
Mary Sue and Clark Robson  
Charitable Gift Fund  
Manuel N. Rodriguez  
Scott C. Rolles  
Mr. and Mrs. Robert Rosenman  
Dr. and Mrs. Myron Rosenthal  
William Ross and Margot Dick  
Mrs. Bernard K. Rothenberg  
Ruml Leithner Family Fund  
Carin and Ronald Ruzicka  
Jennifer and Patrick Ryan  
Amy and John Saar  
Michelle L. and Ronald I. Saltz  
Lylah M. Schieck  
Drew and Karenna Schiff  
Elizabeth Schiff and  
Andrew Kaufman  
Janny Scott and Bill Ritter  
Mr. and Mrs. Christopher J. Seiber  
Scott Shaw  
Maria G. and Brian M. Shydlo  
Erik Simpson  
Alan B. Shifka Foundation, Inc.  
Edna and Jonathan Solnis  
Judith and Peter Som  
Somalwar Family Fund  
Phyllis Strickler  
John C. Stuart  
Students of PS 14  
Students of Temple Shaaray Tefila  
Ellen Sun  
Susan J. Suwinski  
Harold W. Sweatt Foundation  
Mr. and Mrs. Marcel Tenenbaum  
Electra and Christopher Toub  
Adrian Touw  
Julia A. Tullis

Wilhelmina O. and Thomas J. Uhl  
United Way of King County  
Robert J. Van Andel  
Mr. and Mrs. Daniel J. Vantucci  
Mr. and Mrs. Robert P. Viarengo  
Ruby and Martin Vogelfanger  
Philanthropic Fund  
Wayne Walker  
Barbara Walsh  
Mrs. Marjory S. Walters  
Laura Weisel  
Mildred and George Weissman  
Philanthropic Fund  
Daniel D. Wile  
Christopher B. Wilson  
Maureen Wimmer and James Bell  
Linden and Scott D. Wise  
Sotos and Fernanda Yannopoulos  
Mr. and Mrs. Ronald H. Yee  
Yosemite Association  
Benjamin L. Zucker  
1 anonymous donor  
\*deceased

## DONORS TO SPECIAL EVENTS

### \$50,000 and above

Allen & Co.  
Bristol-Myers Squibb Company  
Consolidated Edison Company  
of New York, Inc.  
Credit Suisse First Boston  
Mr. and Mrs. Eugene R. McGrath  
The William T. Morris  
Foundation, Inc.  
The Howard Phipps Foundation  
May and Samuel Rudin Family  
Foundation, Inc.  
Virginia and Warren Schwerin  
Allison and Leonard Stern  
Ann and Thomas Unterberg  
Ward W. and Priscilla B. Woods  
Donald and Barbara Zucker  
Foundation

### \$25,000 - \$49,999

Burberry  
Jonathan L. Cohen  
Cravath, Swaine, & Moore  
Louise B. & Edgar M. Cullman  
Foundation  
Mrs. Charles A. Dana, Jr.  
Debevoise & Plimpton  
Mr. and Mrs. William E. Flaherty  
Antonia and George J. Grumbach, Jr.  
Patricia Hearst and Bernard Shaw  
The Heidtke Foundation, Inc.  
Homeland Foundation, Inc.  
Marsh USA Inc.  
Katharina Otto-Bernstein and  
Nathan Bernstein  
Patterson, Belknap, Webb & Tyler  
Virginia and Stanley Picheny  
The Rockefeller Group  
Mr. and Mrs. David T. Schiff  
Shearman & Sterling  
The Starr Foundation  
Mr. and Mrs. Daniel K. Thorne  
Tiffany & Co.

Ann and Andrew Tisch  
Elizabeth and E. Lisk Wyckoff

### \$10,000 - \$24,999

Jessie and Rand Araskog  
Bloomberg  
Carolyn Lloyd-Cohen and  
Patrick Turbett  
The Walt Disney Company  
Ernst & Young LLP  
Armand G. Erpf Fund, Inc.  
The Charles Evans Foundation  
Fox & Fowle Architects  
Candice and John Frawley  
Sunny and Brad Goldberg  
Goldman Sachs Group, Inc.  
Hackensack University Medical  
Center Foundation, Inc.  
Anne Hearst  
Barbara Hearst  
John N. Irwin III  
JP Morgan Chase  
Anita L. Keefe  
Stephanie Krieger  
Latham & Watkins LLP  
The Lipton Foundation  
Judith and David Marrus  
McKinsey & Company, Inc.  
Mercer Delta Consulting LLC  
The Moore Charitable Foundation  
NBC  
The Pfizer Foundation  
PSEG EnergyTechnologies Inc.  
Joan and Robert Rechnitz  
Ashley R. Schiff  
Mr. and Mrs. Stephen A. Schwarzman  
Seaward Corporation  
Coty Sidnam and Pamela Thye  
Mr. and Mrs. Robert F.X. Sillerman  
Judy and Michael Steinhardt  
Andrea Stern  
Edward Stern and Stephanie Rein  
The Tomorrow Foundation Inc.  
Wachtell, Lipton, Rosen & Katz  
TD Waterhouse USA  
Young & Rubicam, Inc.

### \$5000 - \$9999

Anne and Steven Ames  
The Blackstone Group  
Dayton T. Carr  
Guy Cary  
ContiGroup Companies Foundation  
Bobbie Crosby  
Mark F. Dalton  
Cleveland H. Dodge  
Foundation, Inc.  
The Charles Evans Foundation  
Muffy and Xavier Flouret  
Elizabeth and Patrick Gerschel  
John and Marcia Goldman  
Philanthropic Fund  
Deborah and Allen Grubman  
Jo Anne and Robert C. Hacker  
Marlene Hess and James D. Zirin  
Independence Community Bank  
Dayssi Olarte de Kanavos and  
Paul Kanavos

Kekst & Company, Inc.  
Elyssa Kellerman  
Mrs. Elysabeth Kleinhans  
Davy Lapa  
Loews Corporation  
Mr. and Mrs. Roman Martinez IV  
Edith McBean  
Sally Dodge Mole and  
MDale Guldbrandsen  
Monterey Fund, Inc.  
Mr. and Mrs. George K. Moss  
Patricof Family Foundation Fund  
Denise Rich  
Patty and John Rosenwald, Jr.  
The Solow Foundation  
Liz and Emanuel Stern  
The John L. and Sue Ann Weinberg  
Foundation  
Kay and Frank Woods

### \$1000 - \$4999

Rolando T. Acosta  
APAS Foundation  
Andy Arno  
Jakie P. Astier  
Muffie Potter Aston and  
Dr. Sherrell J. Aston  
Astroland Kiddie Park, Inc.  
Atlantic Mutual Insurance  
Company  
Mr. and Mrs. David Baldwin  
Francis and Edward Barlow  
Elizabeth E. Bartlett  
Jayne and Paul Becker  
CeCe Black  
The Boston Consulting Group, Inc.  
Jill Braufman and Daniel Nir  
Brighton Development  
Mr. and Mrs. Garrison W. Brinton  
Linda and Neill Brownstein  
Mr. and Mrs. George Bullen  
Dahlia and Dominic Capolongo  
Linda and Arthur Carter  
Carter, Ledyard & Milburn  
Ellen Unterberg Celli  
Michele J. Cestone  
Bonnie and Clive Chajet  
Chanel, Inc.  
Mr. and Mrs. J. Michael Cline  
Mr. and Mrs. R. H. Clymer III  
Claudia Cohen  
Betsy and Alan D. Cohn  
Ann and Geoffrey Coley  
Christa and William Conway  
Nancy Corzine  
Mr. and Mrs. Horace Crary, Jr.  
Ellin and Ron Delsener  
Deno's Wonder Wheel Park  
S. DiGiacomo & Son, Inc.  
Vince P. Di Miceli  
Jock and Elly Elliott  
Mr. and Mrs. Nicholas Evans  
Robert and Elizabeth Fisher Fund  
Thomas P. Fitzpatrick  
Flag Luxury Properties, LLC  
Frenkel & Co., Inc.  
Michael Fuchs Charitable  
Foundation  
Hope L. and John L. Furth  
Dr. Ronald B. Gaeta and  
Mrs. Whitney-Lowrey Gaeta  
Robert Golden and  
Maureen Moore  
Mr. and Mrs. Harrison Goldin  
Dr. Laurie R. Goldstein  
Jamee and Peter Gregory  
Leslie L. Groff  
Thomas Guinzburg  
Mr. and Mrs. John H. Gutfreund  
Susie Gilder Hayes and  
Edward Hayes  
Harriet Heilbrunn  
Jackie and Keith Hennessey  
Don and Marilyn Berger Hewitt  
Caroline Hirsch and Andrew Fox  
The Richard L. Hirsch Foundation, Inc.  
Kathryn Hoenig and  
Douglass Maynard  
The Ironhill Foundation  
Joele Frank, Wilinson  
Brimmer Katcher  
Julien J. Studley, Inc.  
Mr. and Mrs. George S. Kaufman  
Mr. and Mrs. Robert W. Kean  
Mr. and Mrs. John R. Kennedy  
Dr. Valerie King and  
David R. Jones  
Gloria C. Kisch  
Michelle and Kevah Konner  
Mr. and Mrs. Werner H. Kramarsky  
Thomas F. Kranz  
Mr. and Mrs. Barry Kringstein  
Margo Langenberg  
Carol and James Large  
Mr. and Mrs. Leonard A. Lauder  
Jo Carole and Ronald S. Lauder  
Jeanne K. Lawrence  
Thomas H. Lee and  
Ann Tenenbaum  
Dalia and Laurence C. Leeds  
Richard S. and Karen LeFrak  
Charitable Foundation, Inc.  
C. B. Lesesne  
Nancy S. Leshner  
Frances and Jack Levy Foundation  
Priscilla and Walter Liebman Fund  
Lostand Foundation, Inc.  
Cynthia and Dan Lufkin  
Kiera and Jerry Lynch  
Andrew and Liz Smith Malik  
Ellen and James S. Marcus  
Dolly and Charles B. Mayer, Jr.  
Kevin McCaffrey  
Liz and David McCreery  
Mary N. and James K. McGowan  
F&G Mechanical Corporation  
Mr. and Mrs. Frederick A. Melhado  
Mr. and Mrs. Eugene Mercy, Jr.  
Mary and Sam Miller  
Mrs. Stanley R. Miller  
Gillian and Sylvester Minitier  
Marcia Nishaan  
Melissa and Robert Mittman  
Ambrose K. Monell  
Georgette Mosbacher  
Kimberly A. and Jeffrey C. Moskowitz



Theresa and Robert Mullarkey  
Donald Mullen  
Elizabeth P. Munson and  
Robert L. von Stade  
Daniel L. Nir and Jill Braufman  
Drs. Ralph and Jadviga Da Costa Nuñez  
Richard Nye Foundation  
Mr. and Mrs. Chips C. Page  
The Perelman Family Foundation Inc.  
Lewis Rabinowitz  
Miriam and Lorin L. Reisner  
Richmond County Savings  
Foundation  
Amy and Larry Robbins  
Amy and Hartley Rogers  
Mr. and Mrs. Theodore Roosevelt IV  
Jonathan P. Rose  
Laura Ross  
Carin and Ronald Ruzicka  
Emily and James Satloff  
Karenna and Drew Schiff  
Mort Schrader  
Cynthia L. Sears and Frank Buxton  
Securities Industry Automation Corp.  
Mary Joan Hoene Seiter and  
Stephen R. Seiter  
Jon Serbin  
Susan and Alexander Slater  
Alan B. Slifka  
Peter J. Solomon Family Foundation  
Lucy B. Sprunger  
Mr. and Mrs. Andrew P. Steffan  
Charlotte S. and Henry G. Stifel  
Mary and Dana Streep  
Stribling & Associates Ltd.  
Dr. and Mrs. Patrick Stubgen  
Mr. and Mrs. William C. Stutt  
Sarah Nash and Michael Sylvester  
Syska & Hennessy, Inc.  
Toucan Capital Corp.  
Mary Margaret and  
John Trousdale  
Mr. and Mrs. William A. Volkhausen  
Susan and Kenneth L. Wallach  
Mr. and Mrs. Alan N. Weeden  
Elizabeth S. and Steven M. Weinstein  
Harriet Weintraub & Partners, Inc.  
Mr. and Mrs. Ronald Weintraub  
Beth and John Werwaiss  
Dr. and Mrs. Robert D. Wickham  
Peter W. Williams  
Mr. and Mrs. Charles L. Wilson III  
Mr. and Mrs. Phillip M. Winegar  
Mr. and Mrs. Larry A. Wohl  
Nora and Sam Wolcott  
Dr. and Mrs. Jonathan Zizmor  
1 anonymous donor

#### **CORPORATE BENEFACTORS AND PRESIDENT'S CIRCLE**

(Gifts of \$25,000 and above)

BP International  
Bristol-Myers Squibb Company  
Business Management Tools, Ltd.  
Citigroup Foundation  
Liz Claiborne Foundation  
Con Edison Company of  
New York, Inc.  
Disney Wildlife Conservation Fund  
Fuji Photo Film U.S.A., Inc.  
GE Foundation  
Hillside Capital Inc.  
Independence Community Bank  
Independence Community Foundation

ING  
JP Morgan Chase  
Mitsubishi International  
Corporation Foundation  
The New York Times Company  
Foundation  
The Pfizer Foundation  
Pfizer Inc./Animal Health Group  
The Tiffany & Co. Foundation  
UBS

#### **CORPORATE PATRONS**

(Gifts of \$10,000 to \$24,999)

Altria Group, Inc.  
American Express Company  
Anson Energy Corporation  
The Bank of New York  
Bloomberg  
Capital Group Companies  
Charitable Foundation  
Colgate-Palmolive Company  
Credit Suisse First Boston  
Ernst & Young LLP  
Goldman Sachs & Co.  
Home Depot  
HSBC Bank USA  
Keefe, Bruyette & Woods, Inc.  
Lost Arrow Corporation  
Merrill Lynch & Co. Foundation Inc.  
Moody's Foundation  
Morgan Stanley  
New England Biolabs Foundation  
Rockefeller Group International, Inc.  
Shell Rocky Mountain  
Sony Corporation of America  
Time Warner, Inc.  
Topics Entertainment  
Toshiba America Foundation  
WG Trading Company  
The H.W. Wilson Foundation, Inc.

#### **CORPORATE SPONSORS**

(Gifts of \$6,000 to \$9,999)

Automatic Data Processing  
Chevron Research and Technology  
Company  
Microsoft Corporation  
Park Summit Realty Corp.  
/The Mayflower Hotel  
Social and Environmental  
Entrepreneurs, Inc.  
Time, Inc.

#### **CORPORATE MEMBERS**

(Gifts of \$3,000 to \$5,999)

Banovich Art, Inc.  
The Bloomingdale's Fund of the  
Federated Department Stores  
Foundation  
Center for Environmental Research  
The Guardian Life Insurance  
Company  
Henry Schein, Inc.  
International Paper Company  
Foundation  
McGraw-Hill Companies  
MetLife  
Rotella Capital Management, Inc.  
Unilever  
Washington Mutual Bank

#### **CORPORATE ASSOCIATES**

(Gifts of \$1,000 to \$2,999)

83-33 Garden, Corp

American Ref-Fuel Company  
Bay Ridge Parks & Waterfront  
Council Inc.  
Bunge North America  
Consumers Union  
Hammes Company Sports  
Development, Inc.  
Horizon Land Services LLC  
Kings Plaza Shopping Center and Manna  
Meadow Veterinary Hospital  
Miami Diver, Inc.  
Moritz Cadillac, Inc.  
Old Friends Hunting and  
Shooting Company  
Quadrangle Group Foundation Inc.  
Reserve Management Corporation  
San Juan Hand Therapy  
Schroder Investment Management  
North America Inc.  
Stay, Inc.  
USA Networks Foundation  
Wilder Property Companies, Inc.  
World Reach Inc.

#### **MARKETING PARTNERS**

Amerada Hess Corporation  
American Express Company  
Colgate-Palmolive Company  
Con Edison Company of  
New York, Inc.  
Coors Brewing Co.  
Delta Air Lines  
FamilyFun Magazine  
FleetBoston Financial  
Fuji Photo Film USA, Inc.  
Health Plus  
J&J Snack Foods Corporation  
Montefiore Medical Center  
Norwegian Cruise Line  
Nestle Waters USA  
New York Liberty  
PepsiCo.  
Pepsi-Cola Bottling of New York, Inc.  
Reckitt Benckiser

#### **GIFTS-IN-KIND**

A.T. Cross Co.  
Animal Fair  
Applebees  
archipelago  
Au Bar  
Barnes & Noble  
John and Debbie Behler  
Bombardier  
Big Apple Circus  
Bluefly.com  
Boru Vodka  
Brooklyn Brewery  
Brooklyn Cyclones  
Scott Andrew Cally  
Cardiovascular Ultrasound  
Sally and Richard Carp  
Debby Carter  
Chicago City Limits  
Circuit City  
City Parks Foundation/  
Central Park Summerstage  
Chicago City Limits  
Christopher Cutler Rich Memorial Trust  
CK Bradley  
Coach  
Delta Airlines  
Dangerfield's  
Dylan's Candy Bar

Egret's Landing  
Equinox  
Jeanne Faga  
Diane and Jerry Fishman  
Folkmanis  
Forbes Inc.  
Golf Club at Chelsea Piers  
Gotham Comedy Club  
Heartbeat Restaurant  
Henry's End Restaurant  
Elizabeth V. Hillyer, DVM, FLS  
Hollywood Video  
"I AM MY OWN WIFE"  
Independence Community Bank  
IZZIE Beverage Company  
JP Morgan Chase Company  
JetBlue Airways  
K & M International  
Kiehl's  
Killington  
Lancôme, Paris  
London Zoological Society  
Macy's  
Mr. and Mrs. Charles Maraziti  
Honorable Marty Markowitz  
Metamorphosis Day Spa  
Michael C. Fina  
Midnight Express  
Dry Cleaning  
Museums New York  
Naked Boys Singing  
New Jersey Devils  
New York Giants  
New York Liberty  
New York Pet Tails  
Nikon USA  
Norwegian Cruise Line  
Novotel  
Peanut Butter & Co.  
PepsiCo.  
Philips Medical Systems  
Play Visions  
Putumayo World Music  
Reader's Digest  
Rinascere Studios  
Roundabout Theater  
Company  
San Diego Zoo  
Sean Sappleton  
Diane Shapiro  
Paul Sieswerda  
Southwest Airlines  
Staten Island Yankees  
Stew Leonard's  
Time Out New York  
Tiffany & Co.  
Tropicana Dole Products, Inc.  
United Nations  
Alexander Vermonty  
Versar, Inc.  
The Village Voice  
Videofilm Systems, Inc  
Virgin Atlantic Airways  
Warm Fuzzy Enterprises  
Wendy's International  
WordsWorld Communications  
Pat and Rogih Yazgi  
Yellow Book  
Zippo Manufacturing Company

(Great care has been taken to  
ensure the accuracy of this list.  
Please accept our apologies for  
any omissions or inaccuracies.)



Elyssa Kellerman with Cetacean Research and Conservation Program staff in Gabon.

**The Wildlife Conservation Society is pleased to recognize the annual support provided by our Patrons and International Associates.**  
+ indicates International Associates

Mrs. Louis Adler  
Mr. and Mrs. Joseph Allen  
Nancy and Christopher Ankner  
Mr. and Mrs. Alan Ascher  
Mr. E. Nelson Asiel  
Dr. Janet J. Asimov  
Norma and Tony Asnes  
+Dr. Amy Attas and  
Stephen Shapiro  
Mr. and Mrs. Frank J. Avellino  
Ms. Patricia I. Avery  
Mr. and Mrs. Jerry Ball  
Mr. and Mrs. Michael A. Barasch  
Maurice and Lillian Barbash  
Mr. and Mrs. Robert Bateman  
F. Harlan and Veronique Batrus  
+Perry S. Bechky and Sirina Tsai  
Mr. and Mrs. Ronald N. Beck  
Garrard Beene and Evan Mason  
Harvey and Jayne Becker  
Mr. and Mrs. Laurence D. Belfer  
Honorable Lucy Wilson Benson  
Mr. and Mrs. Bruce Bent  
Dr. and Mrs. Alan S. Berkeley  
Mr. and Mrs. Joseph L. Berkman  
Mr. and Mrs. Mortimer Berkowitz III

Ms. Sheri E. Berman and  
Mr. Gideon G. Rose  
Mr. and Mrs. Richard A. Bernstein  
Mrs. Therese Bianco  
+John C. Bierwirth  
Mr. and Mrs. Ira Birnbaum  
Mr. and Mrs. Lloyd C. Blankfein  
Ms. Lois D. Blumenfeld  
Robert and Marilyn Bookchin  
Eric and Cynthia Bothwell  
The Honorable and  
Mrs. W.L. Lyons Brown, Jr.  
Ms. Marilyn Bruneau  
+Rev. and Mrs.  
C. Frederick Buechner  
Mr. and Mrs. James E. Burke  
Mr. and Mrs. John W. Burkhart  
+Clifford N. Burnstein  
& Sabra C. Turnbull  
Mr. and Mrs. Willard C. Butcher  
Mr. and Mrs. Samuel C. Butler  
Mr. and Mrs. Thomas P. Caine  
Mr. and Mrs. Donald G. Calder  
Mr. and Mrs. Charles W. Calomiris  
Dr. and Mrs. Walter W. Carey  
Mr. Guy Cary  
Tom and Gayle Casselman  
Mr. and Mrs. Stanley Chamberlin  
Dr. Tylis Y. Chang and  
Dr. Denise McAloose  
+Percilla A.L. Chappell  
Mrs. Thomas H. Choate

+Jane K. Clark  
Mr. and Mrs. Jonathan C. Clay  
Jane E. Clifford  
Bruce E. Cobern  
+Mr. and Mrs. Jon C. Coe  
Jonathan L. Cohen and  
Allison Morrow  
Mr. and Mrs. Harvey M. Cohen  
Dr. and Mrs. Herbert G. Cohen  
+Joseph F. Coleman  
Mark and Paula Colen  
Mrs. Robert S. Collins  
Mr. and Mrs. Howard J. Colson  
Romy and David Coquillette  
Mr. and Mrs. Horace I. Crary, Jr.  
+Mrs. Catherine G. Curran  
+Anne G. Curtis  
Dr. Anne McB. Curtis  
Mrs. Charles A. Dana, Jr.  
Stephen and Mary Beth Daniel  
Lillian Daniels  
+George Davidson and  
Eileen Glynn  
+John and Judith Day  
+J. R. Davey  
Mr. and Mrs. Alfred C. DeCrane, Jr.  
Mr. and Mrs. Michael Delaney  
Richard M. DeMartini and  
Jennifer L. Brorsen  
Mr. and Mrs. Jean Denoyer  
+William E. Derrenbacher  
Colin and Brenda Devine

Mr. and Mrs. Erin C. Devlin  
Mr. and Mrs. Martin Diamond  
Mr. and Mrs. Joseph A. DiMenna  
Mrs. Del Donati  
Mr. and Mrs. Andre Donikian  
Charles E. Dorkey III  
Jacqueline H. Dryfoos  
Mr. and Mrs. Christopher J. Durso  
Mr. and Mrs. Blair W. Effron  
Mr. and Mrs. David A. Egan  
Benjamin Eisenberg and  
Laurie Anderson  
Mr. Leigh Ekstein and  
Ms. Dana L. Telsey  
Ms. Judith Elkin and  
Mr. Ralph Carabetta  
Mr. and Mrs. John Elliott, Jr.  
Mr. and Mrs. Martin C. Eltrich III  
+Carl D. Emont and Eve J. Mansel  
Blair A. England and  
Peter H. Carlin  
Mr. and Mrs. David B. Epstein  
Mr. and Mrs. Charles H. Erhart, Jr.  
Mr. and Mrs. Robert Esnard  
Richard and Cecilia Fabbro  
Mr. and Mrs. Douglas C. Fischer  
+Mr. and Mrs. Baruch Fischhoff  
Mr. and Mrs. David I. Foley  
Katherine G. Frase and  
Kevin McAuliffe  
Mr. and Mrs. John R. Frawley  
+Gregory Garnant



Albert H. and Wanatha P. Garner  
Mr. and Mrs. Seymour L. Gartenberg  
+Mr. and Mrs. Mark T. Gates, Jr.  
Mrs. Edward H. Gerry  
William and Judy Gibbons  
Mrs. Joseph Gleicher  
Mr. William T. Golden and  
Dr. Jean E. Taylor  
Karin Goldmark and  
Andrew Pernambuco  
Dr. Laurie R. Goldstein  
Irvin H. Gordon  
Mr. and Mrs. Al Gore, Jr.  
Peter M. Graham  
Mr. and Mrs. Jay Greenberg  
Mr. and Mrs. Paul R. Greenwood  
Mr. and Mrs. Mark Grier  
Mr. and Mrs. Daniel Griffin  
James H. Griffin  
Mr. and Mrs. George J. Grumbach, Jr.  
+Winston Guest  
Mrs. Janice P. Haggerty  
Victoria Hansen  
Bill and Ruth Ann Harnisch  
Helen Leale Harper, Jr.  
+George Harrington  
Curtis and Sandra Harris  
James N. Hauslein  
+Mr. and Mrs. Harvard K. Hecker  
Mr. and Mrs. Andrew Heiskell  
John and Janet Hellier  
Jackie and Keith Hennessey  
Mr. and Mrs. Harry B. Henshel  
+Jennifer Herring  
Mr. and Mrs. Donald Hewitt  
Andrew and Jody Heyward  
Mr. and Mrs. Norman Hinerfeld  
Mr. and Mrs. Frank W. Hoch  
Mr. and Mrs. Joseph Hofheimer  
Frank and Kristin Hohmann  
Mr. and Mrs. Michael J. Horvitz  
John and Anne Howat  
Hans P. Huber  
Robert A. Hutchens and  
Randi J. Brosterman  
Mr. and Mrs. John N. Irwin III  
Mr. and Mrs. Edgar E. Jackson  
Ms. Betty Wold Johnson and Mr.  
Douglas F. Bushnell  
Mr. and Mrs. Frederick Kaden  
Mr. and Mrs. Fred Kambeitz  
Richard Kandel  
Patricia and Paul Kaplan  
Robert S. Kaplan  
Mr. and Mrs. John E. Karlin  
Mrs. Stephen M. Kellen  
Elyssa Kellerman  
Mr. and Mrs. Kevin W. Kennedy  
Mr. and Mrs. Henry Kibel  
Mark E. and Anla Cheng Kingdon  
Mr. and Mrs. Harold Kingsberg  
Dr. and Mrs. Michael G. Kirsch  
Gail A. Kizner  
Margaret K. Klein  
Mrs. Elysa Kleinhaus  
+Jodi and Keith Kleinick  
Mr. and Mrs. Michael J. Kowalski  
Mr. and Mrs. Werner H. Kramarsky  
Mr. Richard P. Krasnow and  
Ms. Nancy Meyrich  
Marian I. Krauss  
Mr. and Mrs. Konrad R. Kruger  
Mr. and Mrs. Robert Kruger  
+Carol A. and Michael S. Kurtz  
Mr. and Mrs. Benjamin V. Lambert  
Mr. and Mrs. Leonard A. Lauder  
Mr. and Mrs. Alexander M. Laughlin  
Mrs. Dorothea Lawson  
Mr. and Mrs. Steven Lax  
Steven and Nancy Lear  
Mr. and Mrs. David S. Lederman  
Jonathan E. Lehman  
Mr. and Mrs. Richard I. Lesser  
Marion H. Levy  
Mr. William G. Levy  
Mr. and Mrs. Richard Lewent  
Mr. and Mrs. Peter R. Limburg  
Lawrence and Dana Linden  
Kathleen Lingo  
Mr. and Mrs. Martin Lipton  
Mr. and Mrs. Thomas H. Lister  
Steven Littman and Diane Tarbell  
Mr. and Mrs. Harvey Litwin  
Lorna M. Livingston  
William B. Lloyd  
Joseph and Clare LoCicero  
Mr. and Mrs. Peter K. Loeb  
Mr. and Mrs. Craig H. Loweth  
Mr. and Mrs. George T. Lowy  
Mr. and Mrs. Dan W. Lufkin  
Kevin Lundeen and  
Elise Goldschlag  
Mr. and Mrs. Jerome F. Lynch  
Janice MacAvoy and Johnson  
McKelvy  
Mr. and Mrs. Copeland MacClintock  
Edith W. MacGuire  
Mr. and Mrs. Bernard L. Madoff  
Andrew and Deborah Madoff  
Mr. and Mrs. James I. Magid  
+Jennifer C. Maitland  
+Andrew and Gemma Major  
Mr. and Mrs. Peter L. Malkin  
Mrs. Frits Markus  
Mr. and Mrs. David S. Martin  
Mr. and Mrs. Michael T. Martin  
Mr. and Mrs. Roman Martinez IV  
Mr. and Mrs. Robert C. Marvel  
Maria and Nick Masciotti  
Mr. and Mrs. Pels A. Matthews  
+A. K. Matsumoto  
Mr. and Mrs. Charles B. Mayer, Jr.  
Mr. and Mrs. John R. McCaffrey  
Mr. and Mrs. John F. McGillicuddy  
Luanne McGrain and  
Eric Brauer  
+Emily B. McKay  
Mr. and Mrs. Eugene R. McGrath  
William B. McKeown and  
Constance C. Coles  
Martha B. McLanahan  
Mr. and Mrs. Roemer McPhee  
Dr. and Mrs. Mark Meadow  
Diana and Robert Mercer  
Steven Meyer and Carol Sze  
Mr. and Mrs. Louis J. Mezzina  
+Mr. and Mrs. Brian R. Michael  
Mr. and Mrs. Richard A. Miller  
+Mr. and Mrs. Sam Scott Miller  
+Dr. and Mrs. Irwin W. Mindell  
Stacey and Eric Mindich  
Mr. and Mrs. Sylvester Minitier IV  
Drs. Enrique and Barbara Monsanto  
Mr. and Mrs. Michael A. Moran  
Ann L. Morfogen  
Mr. and Mrs. John P. Morgan II  
Dr. Daniel A. Moros and  
Dr. Ann W. Schongalla  
Mr. and Mrs. Jay B. Morrow  
Mr. and Mrs. Lester S. Morse, Jr.  
Mr. and Mrs. Charles H. Mott  
Rosemary A. Moukad  
Stephanie Mudick and  
David Gottlieb  
+Cathryn L. Mueller  
+Amy J. Munich  
Elizabeth P. Munson  
Mr. and Mrs. Donald B. Murphy  
Drs. Martin Nash and  
Jack Hennigan  
Mr. and Mrs. Roy R. Neuberger  
Roy Newman  
Mrs. Marguerite S. Nichols  
James C. Nolan and Yumiko Inoue  
Mr. and Mrs. Wilson Nolen  
Drs. Ralph and  
Jadviga Da Costa Nuñez  
Mr. and Mrs. Edwin N. Ordway, Jr.  
David Orentreich  
Dr. and Mrs. Norman Orentreich  
Mr. and Mrs. Robert C. Osborne  
Catherine Palmer and  
Patricia Pileggi  
John Parise and Margo Hassan  
Patricia B. Park  
Dr. and Mrs. Andrew H. Patterson  
Jacqueline Pearlman  
Mr. and Mrs. John R. Peckham  
Mr. and Mrs. Jeffrey R. Peltier  
William H. Perry, III  
+Frederick Petrie  
Mr. and Mrs. Frank D. Pierson  
+Michael J. Piuze  
Mr. and Mrs. Russell H. Pollack  
Judith Ann Post  
Dr. and Mrs. Simon Poyta  
Lauretta Prestera  
Alesia Ranney-Marinelli  
+Katharine A. Ray  
+Linda Raynolds and Elijah Cobb  
Mr. and Mrs. Adam Reeder  
+Mr. and Mrs. J. Stanley Reeve  
Deborah Reich  
Mrs. Thelma Reisman  
Wendy L. and Robert M. Riggs  
Mr. Jonathan Rinehart  
Mr. David Rockefeller  
Jack A. Robbins  
Mr. Nelson A. Rockefeller, Jr.  
Mr. and Mrs. Jonathan P. Rosen  
Faith Rosenfeld  
Mr. and Mrs. Axel G. Rosin  
+Michael and Irene Ross  
Mr. and Mrs. Ronald Roxby  
Mr. and Mrs. Michael K. Rozen  
Mr. and Mrs. Stephen T. Rubinstein  
Mrs. Dorothy K. Rupp  
Dr. Jeffrey A. Sachs  
Stuart M. Salenger  
Steven and Rosalie Sanderson  
Mr. and Mrs. David B. Schiff  
Mr. Walter J. Schloss  
John Schumacher and Albert Nicol  
Mr. and Mrs. Brian P. Schwartz  
Mr. and Mrs. Stephen R. Seiter  
Mr. and Mrs. Howard W. Shawn  
Felice K. Shea  
Mr. and Mrs. Neal Shear  
Mr. and Mrs. Steven R. Sheck  
Mr. and Mrs. Eric P. Sheinberg  
+Carol and Stephen Shey  
Sheila J. Siderman and Jerry Palin  
Fredric A. Silberman and  
Sharon K. Siegfried  
+Jeffrey and Andrea Silver  
Jonathan M. Simon  
Paul E. Singer  
Mr. and Mrs. Manoj P. Singh  
Mr. and Mrs. Alexander B. Slater  
Mr. and Mrs. James C. Smith  
Greta Smith Green  
Denise Sobel and Norman Keller  
+Robert Spehar  
+Mr. and Mrs. Peter Stearns  
Gillian V. and Robert K. Steel  
Mr. and Mrs. Andrew P. Steffan  
Emanuel and Liz Stern  
Mr. and Mrs. Daniel H. Stern  
Mr. and Mrs. George Sternlieb  
Mrs. Clare C. Stone  
Ronald J. Strauss  
+Mr. and Mrs. Frank A. Strohm  
Laurie T. Sussman  
Herbert P. Sydney  
Elizabeth and Leonard Tannenbaum  
Jeffrey Taschler and  
Dina Treanor  
Mr. and Mrs. David H. Taylor, Jr.  
Michael F. Teitler and  
Judith Katz  
Suzanne and Marvin Tenenbaum  
Mr. and Mrs. Eugene V. Thaw  
Mrs. Ann W. Thayer  
Patrick J. Thomas and  
Cristina M. Stenbeck  
+Bjorn and Margaret Thorbjarnarson  
Mr. and Mrs. Daniel R. Tisch  
Mr. and Mrs. James S. Tisch  
Jonathan M. Tisch  
\*Mr. and Mrs. Laurence A. Tisch  
Mr. and Mrs. Preston R. Tisch  
Mr. and Mrs. Steve Tisch  
Mr. and Mrs. Thomas J. Tisch  
Mrs. John A. van Beuren  
+Josephine B. Vargas  
Mrs. Grace Lyu-Volkhausen  
Kathryn F. Wagner  
Mr. and Mrs. Howard F. Ward  
Mr. and Mrs. Christopher Waterman  
Mr. and Mrs. Charles E. Webster  
Sharon Wee and Tracy Fu  
Mr. and Mrs. Hedley M. Weeks  
Mr. and Mrs. Charles L. Weinberg  
Mr. and Mrs. John L. Weinberg  
Mary Jane Weiskopf  
Mr. and Mrs. Robert E. Weiss  
Mr. Joel S. Weissman  
Lucille Werlinich  
Dr. and Mrs. Owen Whitby  
Thomas and Paula White  
R. H. Wilder, Jr.  
Mr. and Mrs. William E. Willis  
Mr. and Mrs. Charles L. Wilson III  
Mrs. Linden Wise and  
Mr. D. Scott Wise  
Mr. and Mrs. Richard E. Witten  
Ms. Martha Wolfgang and  
Mr. Peter Hutchings  
Mrs. Janet B. York  
Laura Yorke and  
Richard E. Snyder  
Mr. and Mrs. John R. Young  
+Claire Zabel  
Dr. Joan S. Zofnass  
3 anonymous patrons  
\*deceased

# wildlife heritage circle and bequests

## WILDLIFE HERITAGE CIRCLE (Members have included WCS in their estate plans or other gift arrangements)

Norma J. Abele  
Ethel Adler  
Edwina P. Ahenkora  
Dorothy L. Asendorf  
Dr. Janet Asimov  
Betty L. Barry  
Rhoda Lee Bauch  
Beverly Bender  
Mr. and Mrs. Seymour A. Bender  
Annette Benedict  
Helen Benjamin  
Irmgard Bennett  
Joan Benson  
Honorable Lucy Wilson Benson  
Susanna and Jason Berger  
Ann Berkman  
Gisela and Daniel Berkson  
Priscilla Blakemore  
Louis H. Blumengarten  
Mr. and Mrs. Harvey Bookman  
Margaret A. Borgstrand  
Randy Brook  
Marlene Bryda  
Drs. Cynthia and Robert Burns  
Walter and Sylvia Button  
Michael Campbell  
William H. Canfield  
Dr. Irene Cannon-Geary  
Peggy Catalane  
Caroline and Dominick Celli  
Dorothy Babcock Chapin  
Marie Ciaiola  
Emily Clifton  
Albert Cohen and Eleanor Herman  
Louise G. Collins  
Margery Cornwell  
Rhonda Coulston  
Dr. Susan Cropper  
Mrs. Edgar M. Cullman  
Robert Cusick  
Mrs. Charles A. Dana, Jr.  
Joy Darlington  
Countess Emilie de Rohan-Chandor  
Margaret Della Cioppa  
Annette DeLuca  
Heather-Mary Dixon  
Christopher Durso  
Barbara Dzubak  
Dr. Joan Eliasoph  
Mr. and Mrs. John Elliott, Jr.  
William T. Farrar  
Joan L. Faust  
Bonnie Fisher  
Taryn and Howard Fisher  
Robert and Judith Foester  
Connie C. Frazier  
Christopher and  
Desly Movius Fryer  
Margaret Garland  
Lois Gartler  
Evadne Gerrard  
Fred Good  
Barbara Graham  
Margaret and Floyd Grave  
Sharon Grelsamer



WCS Trustee Mrs. Charles A. Dana, Jr., and WCS Chairman  
David T. Schiff. Right: Humpback whale tail-breaches in Madagascar.

Thomas M. Griffing  
Dr. James F. Grillo  
Katharine Gross  
Margaret L. Hagen  
Leo Carl Halpern  
Judith Hamilton  
Mary Harkness  
Gregory F. Hauser  
Mrs. Peg Heath  
Raisa Hebra  
Drs. David and Deirdre Hensen  
Dr. Joseph Q. Heplar  
Amy Hersh  
Joan Hesterberg  
Janet and Fred Hirschler  
Carroll Ann Hodges  
Augusta Hook  
Margaret Rose Hope  
Mr. William Hughes  
Mr. and Mrs. Edgar E. Jackson  
Mr. and Mrs. Howard Jacobs  
Cav. Dr. Irma B. Jaffe  
Sonya Jensen  
Joan and Edward Kaplan  
Mr. and Mrs. John E. Karlin  
Yvonne P. Kenny  
Mrs. Raymond Konopasek  
Edith Kopecky  
Simah Kraus  
Henry Lefer  
Grace Leight  
Suzi Leonard  
Dr. Richard W. Levy  
Lucy D. Lieberfeld  
Michael Lindley  
Kathleen Lingo  
Harvey Litwin  
William B. Lloyd  
Catherine Lomuscio  
Dorcas MacClintock  
Andrew J. Main  
Patricia Malkin  
Mr. and Mrs. James P. Marion, Jr.  
Elizabeth S. Mark  
Mr. and Mrs. George J. Marra  
Edith McBean  
Megan M. McCormick  
Mr. and Mrs. David Herron Meese  
Charles W. Merrels  
Stella Miller

Margo Mindell  
James F. Minter and  
David J. Schnabel  
Max Money  
Richard Montgomery  
Shirley Moreines  
Anne Marie Morris  
Drs. Martin Nash and  
Jack Hennigan  
Mr. and Mrs. Murray L. Nathan  
Claire K. Necker  
Thomas Wm. Nelson  
Larry Ness  
Ronald Nullet  
Marilyn O'Brien  
Mr. and Mrs. David Obedzinski  
Doris Ohlsen  
Austin Okie  
Theresa and Leonard Ornstein  
Antoinette Panico  
Jacqueline Pearlman  
Terry Pelster  
Martha Pezrow  
PKD Trust  
Lauren Pollack  
Jane Cox Ponty  
Dr. and Mrs. Simon Poyta  
Robert M. Preissner  
Lauretta Prestera  
Phil and Irene Pullen  
Eben W. Pyne  
Nancy Reed  
Kathleen Ritch  
Mr. and Mrs. Daniel Rose  
Barbara Rosenthal  
Jacqueline Rossi  
Linda Rothstein  
Mrs. Norma E. Rugg  
Dorothy K. Rupp  
Loretta Russo  
Steven E. Sanderson  
Peter Schaffer  
Ms. Joan Scheier  
Karin and Patrick Schiavone  
Christine Schiavone-McKeon  
Joanne Schiller  
Rena Schilsky  
Marilyn G. Schroeder  
Harriet Segman  
Norma Gudim Shaw

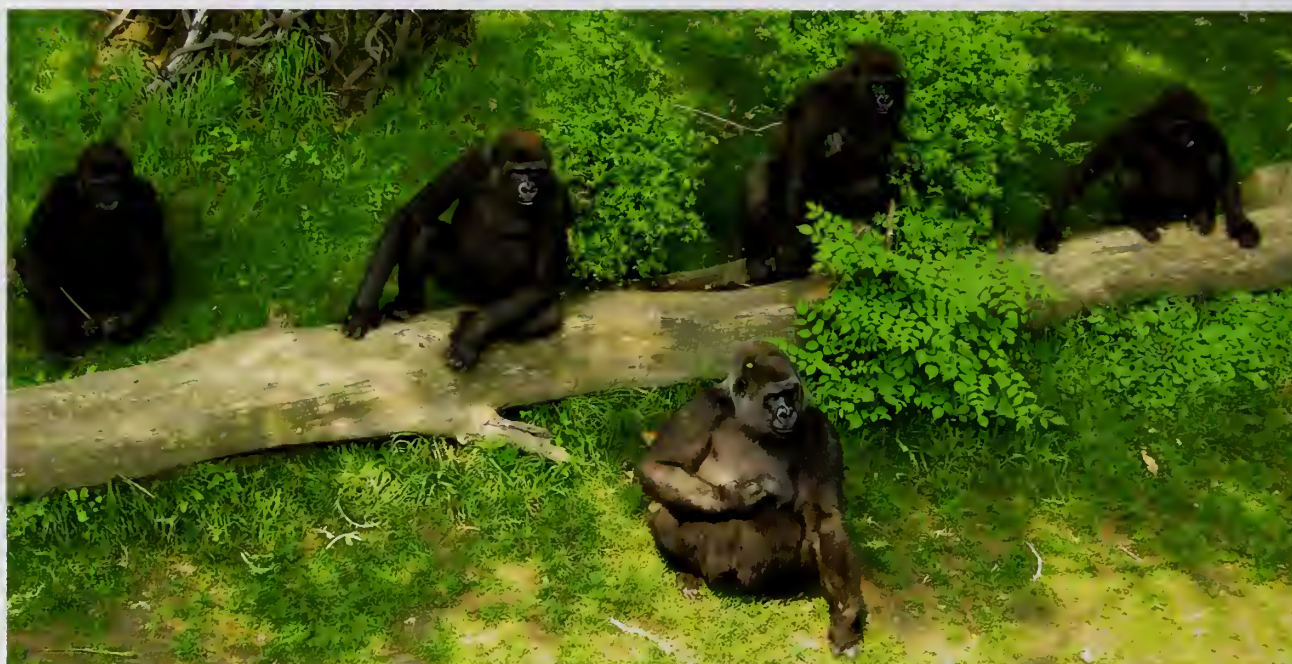
Binkley and Paula Shorts  
Sheila Sideman and  
Jerry Palin  
Fred Siemer  
Sharon Kim Siegfriedt and  
Fredric A. Silberman  
Kenneth L. Smith and Lucia Christopher  
Greta Smith  
Elissa Sommer  
Ferne Spieler  
Adrienne Starfeld  
Marilyn Steele  
C. Streno  
Marie Streno  
Phyllis Strickler  
Dave Stutey  
Susanne Suba-Bloch  
Audrey J. Sutton  
John J. Symansky  
Peggy J. Taleho  
Fran Thomas and Harry Friedman  
David B. and Muriel B. Tischler  
Mercele Trudeau  
Lorraine Umek  
Dr. Hansa van Hove  
Dr. and Mrs. Christopher Vasilopoulos  
Charles O. Vellone  
Teresa L. Vincent  
John and Victoria Walker  
Mrs. Marjory S. Walters  
Fanny E. Warburg  
William T. Warnock  
Ms. Irene Waskow  
Mary E. Warters  
Mr. and Mrs. Douglas P. Warwick  
Marshall Weinberg  
Sylvia and Robert Weiss  
Lucille Werlinich  
Selma Wiener  
Mr. and Mrs. Phillip M. Winegar  
Betty Winkler  
Elizabeth M. Zapp  
Monica E. Zullo  
25 anonymous donors

## BEQUESTS

Leone Adelson  
Sondra R. Albert  
Ruth C. Arps  
Alyse B. Bogert  
Andrea F. Carret  
Winifred T. Carter  
Louise Chaney  
Alan B. Cox  
Wendi Davidson  
Samuel and Hilda Duff  
Stanley Johnson  
Elizabeth S. Livingston  
Ethel Roger Read McDonough  
Anna B. McKenna  
Louise C. Mino  
Daniel Naidamast  
Adolf C. Otten  
Dean Riesner  
August Schmitt  
Agnes Scholl  
Leland Shafer  
Robert C. Skakel  
Andrew Vanderpoel







The Bronx Zoo's spectacular Congo Gorilla Forest provides habitat for 23 western lowland gorillas.

## AQUARIUM COMMITTEE

Brian J. Heidtke\*, *Chair*  
 Ron Adey\*  
 Bruce Bender  
 Dominic A. Capolongo\*  
 Trudy Dolley\*  
 Peter Emerson\*  
 Diane Fishman\*  
 Jerry Fishman\*  
 Mr. David F. Gedris  
 John R. Hearst, Jr.  
 Amy Klein  
 Terence J. Mitchell\*  
 Alton Murray\*  
 Joshua L. Muss  
 Howard Phipps, Jr.\*  
 Charles W. Russell, Jr.  
 Peter G. Schiff  
 Tazewell A. Smith\*  
 Victor Vientos\*  
 Steve Woodroff  
 Patricia Yazgi\*  
 David T. Schiff\*, *ex officio*  
 \*Steering Committee

## COMMUNICATIONS COMMITTEE

Jane Alexander, *Co-Chair*  
 Ann Unterberg, *Co-Chair*  
 Mrs. William C. Beutel  
 John Elliott, Jr.  
 Paul A. Gould  
 Judson C. Green  
 Anita L. Keefe  
 Elyssa Kellerman  
 Michael J. Kowalski  
 Richard I. Lesser  
 Mrs. George K. Moss  
 John S. Newberry IV  
 Mrs. Gordon B. Pattee

Howard Phipps, Jr.  
 Jonathan Rinehart  
 Faith Rosenfeld  
 Cynthia Round  
 Forrest Sawyer  
 Ashley Schiff  
 Andrew H. Tisch  
 David T. Schiff, *ex officio*

## CONSERVATION COUNCIL

Stephanie E. K. Borynack,  
*Co-Chair*  
 Adair R. Byers, *Co-Chair*  
 Lauren L. Kisner, *Co-Chair*  
 Daniel Barnosky  
 Sarah Boardman  
 Lisa Bottomley  
 Keturah Bracey  
 Benjamin C. de Menil  
 Cassin Donn  
 Mettrie Dorsey  
 Christine Elia  
 Blair Endresen  
 Molly Fahner  
 Emma E. B. Froelich  
 Christopher Goodman  
 Nicole Hanley  
 Victoria Hansen  
 Pamela Harrington  
 Tanya Jessop  
 Cornelia Knight  
 Gillian Koenig  
 Harrison LeFrak  
 Christopher H. Manice  
 Claire Milonas  
 Alice Louise Parker  
 Mary Dailey Pattee  
 Alix Peck  
 Raina Penchansky

Emilia Fanjul Pfeifler  
 Mary Ross  
 Heather Sargent  
 Lauren Sbordone  
 Georgina Schaeffer  
 David Slaven  
 Pilar Solimene  
 Margot Streeter  
 Michael Tiedemann  
 Jud Traphagen  
 Jill Unger  
 Whitney Walker  
 R. Scott Zenko

## EDUCATION AND

## EXHIBITION COMMITTEE

Mrs. Charles L. Wilson III, *Chair*  
 Patricia I. Avery  
 John Elliott, Jr.  
 Charlotte K. Frank  
 Candice K. Frawley  
 Robert G. Goelet  
 David R. Jones  
 Sandra Lerner  
 Eugene Linden  
 Peter Madonia  
 Sally Dodge Mole  
 Mrs. George K. Moss  
 Heidi Nitze  
 Dr. Ralph Da Costa Nuñez  
 Annette Urso Rickel  
 Virginia Schwerin  
 E. Lisk Wyckoff, Jr.  
 Barbara Hrbek Zucker  
 David T. Schiff, *ex officio*

## EXPLORERS COMMITTEE

Ann Coley, *Co-Chair*  
 Mary Margaret Trousedale, *Co-Chair*

Barbara and Jude Barbera  
 Cynthia and Ronald Beck  
 Amy and Tim Berkowitz III  
 Jane Pollock and Philip Berney  
 Debby Carter and Charles Conroy  
 Dina and Fouad Chartouni  
 Peri and David Clark, Jr.  
 Isobel and Struan Coleman  
 Ann and Geoffrey Coley  
 Marina and Ian Connor  
 Faith and Peter Coolidge  
 Andrea de Cholnoky and  
 Scott C. Wilson  
 Louise and Alexander Dye  
 Nora and Charles Efron  
 Liette and Mark Eichorn  
 Alison and Douglas Feagin  
 Cozy and Joseph Friedman  
 Rebecca and Larry Grafstein  
 Patricia Halterman  
 Heather and Roger Harper  
 Ann and John Heidenreich  
 Jackie and Keith Hennessey  
 Katie Danziger and Steve Horowitz  
 Ritchey and David Howe  
 Diane and Winston Hutchins  
 Juliette and Mark Janssens  
 Sandy and James Katzman  
 Susan and Walter Keenan  
 Elyssa Kellerman  
 Laura and Michael Koch  
 Tamara and Josh Leuchtenburg  
 Stacey and Keith Locker  
 Leslie and Thomas Maheras  
 Liz and Kelly Martin  
 Joy and Charles McIendon, Jr.  
 Barbara Moore and Miles Glidden  
 Whitney and Clarke Murphy  
 Suzanne and David Oliver



Suzanne and Craig Packer  
 Mimi and Lorin Reisner  
 Amy and Hartley Rogers  
 Heather and John Sargent  
 Lisa Selby  
 Mary Alice and M. David Sherrill  
 Nancy Newton and John Sipp  
 Marcy and Jeffrey Sohm  
 Traie and Doug Teitelbaum  
 Mary Margaret and  
 John Trousdale  
 Lynn and Dan Tudor  
 Kathryn and Bill Tyree  
 Margie and William Ughetta, Jr.  
 Tory and Nelson Walsh  
 Liz and Steve Weinstein  
 Charlotte and John Wickham  
 Paula Zahn and  
 Richard Cohen

#### **INTERNATIONAL CONSERVATION COMMITTEE**

Frederick W. Beinecke\*,  
*Co-Chair*  
 Mrs. George K. Moss\*, *Co-Chair*  
 Jane Alexander\*  
 Marianna Baker  
 Jeffrey L. Berenson  
 Mrs. Henry Breck  
 Eleanor Briggs  
 Mrs. Donald Bruckmann  
 Coleman Burke  
 Gilbert Butler  
 Catherine Cahill  
 Dr. Irene Cannon-Geary  
 Guy Cary  
 Lynn Chase  
 C. Diane Christensen\*  
 J. Michael Cline\*  
 Stephen Cobb\*  
 William G. Conway\*  
 Bobbie Crosby  
 Lucy C. Danziger  
 John Elliott, Jr.  
 Mrs. Laurence Fink  
 William Freeman  
 Murray Gell-Mann  
 Alexandra Goelet  
 Robert G. Goelet  
 Bradley Goldberg  
 Peter Graham  
 Judson C. Green  
 Marc A. Helie  
 John N. Irwin III  
 Christopher W. Johnson  
 Robert W. Kean, Jr.  
 Elyssa Kellerman  
 Michael J. Kowalski  
 James M. Large, Jr.  
 Thomas E. Lovejoy\*  
 Hon. Anthony D. Marshall  
 Edith McBean\*  
 Mary Miller  
 John D. Mitchell  
 Carl A. Navarre, Jr.  
 Mrs. Gordon B. Pattee  
 Merritt Paulson  
 Howard Phipps, Jr.  
 William Rayner  
 Katherine Ruttenberg  
 George B. Schaller\*  
 Walter C. Sedgwick\*  
 Mary Joan Hoene Seiter  
 Mrs. Stanley Shuman

Caroline N. Sidnam  
 Joseph R. Siphron\*  
 Mrs. Joseph R. Siphron  
 Cynthia R. Stebbins  
 Craig Taylor  
 Daniel K. Thorne  
 Pamela M. Thye  
 Reed Beauregard Turner  
 Mrs. Richard B. Tweedy  
 Ann Unterberg  
 Sue Erpf Van de Bovenkamp  
 Alan N. Weeden  
 W. Larry Westbrook  
 Mrs. Samuel H. Wolcott III  
 Ward W. Woods\*  
 David T. Schiff\*, *ex officio*  
 \*Steering Committee

#### **LIVING INSTITUTIONS COMMITTEE**

Mrs. Gordon B. Pattee, *Co-Chair*  
 Barbara Hrbek Zucker,  
*Co-Chair*  
 Cynthia Lewis Beck  
 J. Michael Cline  
 Jonathan L. Cohen  
 Katherine Lange Dolan  
 Gary C. Fink  
 William E. Flaherty  
 Paul A. Gould  
 Brian J. Heidtke  
 Anita L. Keefe  
 Elyssa Kellerman  
 Howard Phipps, Jr.  
 Mrs. Leonard Stern  
 Daniel K. Thorne  
 Mrs. Charles L. Wilson III  
 David T. Schiff, *ex-officio*

#### **NEW ENGLAND COUNCIL**

Caroline H. Hall, *Co-Chair*  
 Jodie D. Stevenson, *Co-Chair*  
 Irene Briedis  
 Mrs. William Cottingham  
 Mark Evans  
 Mrs. Benjamin A. Groves  
 Mr. and Mrs. Frank J. Hallowell  
 Bradley and Beth Hildt  
 Mr. and Mrs. Steven Hoch  
 Jennifer West Lodge  
 John S. Newberry IV  
 Mr. and Mrs. E. Lee Perry  
 Mr. and Mrs. J. Stanley Reeve  
 Mr. and Mrs. J. Carry Rich  
 Mr. and Mrs. Neal Ryland  
 Mr. and Mrs. Robert G. Scott  
 Binkley C. Shorts  
 John G. Stevenson  
 Walter G. Thompson  
 Frederic Winthrop  
 Mr. and Mrs. James. H. Wykoff

#### **NORTHERN CALIFORNIA COUNCIL**

Judith H. Hamilton\*, *Co-Chair*  
 Christopher B. Hockett\*,  
*Co-Chair*  
 Walter C. Sedgwick\*, *Co-Chair*  
 John D. Goldman\*,  
*Honorary Chair*  
 Mr. and Mrs. Geoffrey Baldwin  
 Mr. and Mrs. Richard Bastoni  
 Michael W. Bealmear\*  
 Dr. Walter E. Berger III  
 Ted Breck\*  
 Ron and Susan Briggs

Bruce Brownstein  
 Mr. and Mrs. William N. Bucklin III  
 David S. Buzby and Susheela Vasan  
 Mrs. Brook H. Byers  
 C. Diane Christensen\*  
 Madeleine and Jerry Cohen  
 Marion Cope  
 David Cowan  
 Mr. and Mrs. Stephen Dow  
 Mr. and Mrs. Jonathan Eddy  
 Stephanie A. Evans  
 Mr. and Mrs. Donald G. Fisher  
 Robert J. Fisher  
 Astrid Flood\*  
 Elizabeth W. Gates  
 James R. Gates  
 Linda Gladstone  
 Mrs. Fritz Grau  
 Thomas Hale  
 Mrs. William H. Hamm III  
 Jo Ann W. Harley  
 Mr. and Mrs. William Harris, Jr.  
 Mrs. James Harvey  
 Mr. and Mrs. Kevin Harvey  
 Kathryn W. Holmes  
 Mr. and Mrs. Richard Holmstrom  
 Wende Hutton  
 Monica Krick  
 Lamar Leland  
 Mr. and Mrs. Randy Livingston  
 William McClatchy  
 Heather McFarlin  
 Patricia McGinnis  
 Christian McIntosh  
 Tom Mudd  
 Hon. William A. Newsom, Jr.\*  
 Terence J. O'Reilly  
 Stephanie Osborne\*  
 Mr. and Mrs. F. Ward Paine  
 Anne L. Pattee\*  
 George D. Phipps  
 J. Jay Pierrepont\*  
 Stephen C. Pratt  
 Richard W. Ross  
 Christopher Seiber  
 Kenneth L. Smith  
 Dr. Marjorie Smith  
 Helen M. Spalding  
 Beverly Spector  
 Craig Taylor  
 Richard J. Thalheimer  
 Jennifer A. Urdan\*  
 Mr. and Mrs. Brad Wentz  
 \*NCC Executive Committee

#### **ANNUAL PATRONS COMMITTEE**

Jackie A. Hennessy, *Chair*  
 Wiggie Bitter  
 Janice P. Haggerty  
 Anne Keating  
 Dawn G. Kisner  
 Elizabeth Kenny Lack  
 Kiera Lynch  
 James C. Nolan  
 Valerie Mnuchin Rozen  
 Alexia Hamm Pickett  
 Donna M. Uher  
 Martha Wolfgang  
 Laura Yorke

#### **SPECIAL EVENTS COMMITTEE**

Mrs. Charles A. Dana, Jr.,  
*Co-Chair*  
 Elyssa Kellerman, *Co-Chair*

Mrs. Leonard Stern, *Co-Chair*  
 Catherine Cahill  
 Candice K. Frawley  
 Mrs. Nan Kempner  
 Ashley R. Schiff  
 Virginia Schwerin  
 Barbara Tober  
 Ann Unterberg  
 Mrs. Charles L. Wilson III

#### **STRATEGIC PLANNING COMMITTEE**

J. Michael Cline, *Co-Chair*  
 James M. Large, Jr., *Co-Chair*  
 Frederick W. Beinecke  
 William G. Conway  
 John N. Irwin III  
 Howard Phipps, Jr.  
 Mrs. Leonard Stern  
 Andrew H. Tisch  
 Ann Unterberg  
 David T. Schiff, *ex officio*

#### **TECHNOLOGY COMMITTEE**

J. Michael Cline, *Chair*  
 William G. Conway  
 Juliet L. Flint  
 Paul A. Gould  
 Greg Harper  
 Kelly McGowan  
 Mrs. George K. Moss  
 Ori Sasson  
 Gary Jon Schneidman  
 Walter C. Sedgwick  
 John M. Stephenson

#### **WILDLIFE HEALTH SCIENCES COMMITTEE**

Caroline N. Sidnam, *Co-Chair*  
 Pamela M. Thye, *Co-Chair*  
 Cynthia Lewis Beck  
 Mrs. William C. Beutel  
 Mrs. David Clark, Jr.  
 Carolyn Lloyd-Cohen  
 Jane Drittel  
 William E. Flaherty  
 Whitney Lowrey Gaeta  
 Robert Gardiner Goelet  
 Leslie L. Groff  
 Brian J. Heidtke  
 Anita L. Keefe  
 Elyssa Kellerman  
 John H. Manice  
 Mrs. Roman Martinez IV  
 Edith McBean  
 Mrs. Howard McMorris II  
 Mrs. Howard Oestreich  
 Valerie Peltier  
 Nicholas R. Perkin  
 Vivian Picheny  
 Charles W. Russell, Jr.  
 Virginia Schwerin  
 Patrick J. Thomas  
 Ann Unterberg  
 Mrs. Samuel H. Wolcott III  
 David T. Schiff, *ex officio*

#### **ANIMAL ENRICHMENT SUB-COMMITTEE**

Katherine Lange Dolan, *Chair*  
 Candice K. Frawley  
 Paul A. Gould  
 Brian J. Heidtke  
 Elyssa Kellerman  
 Barbara Hrbek Zucker

# wcs staff

## PRESIDENT

Steven E. Sanderson, *President and Chief Executive Officer*  
Gail Sheldon, *Chief of Staff*

## SCIENTIFIC FELLOWS

P. Dee Boersma, Enrique Bucher, Adalgisa Caccone, Robert DeSalle, Sylvia Earle, Henry Clay Frick II, John Gatesy, Jane Goodall, James F. Grillo, Clifford J. Jolly, Si-Kwang Liu, Thomas E. Lovejoy, Reed Noss, Jeffrey Powell, Peter H. Raven, Alison Richard, Oliver Ryder, M.S. Silberman, Michael Soule, John W. Terborgh, Elisabeth S. Vrba, Edward O. Wilson

## WILDLIFE CONSERVATION FELLOWS

Brian Currie, Marvin Druger, Francisco Javier Erize, Laurie Goldstein, Nogah Haramati, Senta Raizen, John Sapienza, Stephen A. Schwartz

## WILDLIFE CONSERVATION ASSOCIATES

Sean Aiken, Alvin Breisch, Michaela Catalano, Stephen Factor, Ron Gaeta, Paul Gennis, Mark Goldberger, Stephen Goldstein, Steven Grenell, Lawrence Grunfeld, Richard Hudson, Elliott Jacobson, Lin Klein, Steve Kohn, George Kramer, Mike LaQuaglia, Joseph Levy, Andrew Odum, Andrew Patterson, Kathy Pollina, Peter C.H. Pritchard, Allan P. Reed, Anders G.J. Rhodin, Richard A. Robbins, Andrew Sabin, Barry Salke, Dwight Sieggreen, Stan Silverman, J.J. Steinberg, Charles Stolar, David Stoloff, Steven Stylianos, Rick Sullivan, George Unis, Karen Weidenheim, William Zovickian

## ANIMAL ENRICHMENT PROGRAM SCIENTIFIC ADVISORY COMMITTEE

Frans de Waal, Donald Kroodsmma, Katy Payne, Irene Pepperberg, Sue Savage-Rumbaugh

## LIVING INSTITUTIONS

### Administration

Richard Lattis, *Senior Vice President and General Director, Living Institutions*  
Denise McClean, *Assistant Director, Administration*  
Marion Merlino, *Executive Assistant*  
Randi Winter, *Project Development Coordinator*  
Thea Feldman, *Creative Writer*  
Michelle Midea, *Secretary*

### Wildlife

James Doherty, *Vice President and General Curator*  
James Breheny, *Associate General Curator*



WCS Mammal Department staff pose with Asian elephants at the Bronx Zoo.

### Mammalogy

James Doherty, *Chairman, Carter Chair of Mammalogy*  
Patrick Thomas, *Curator*  
Colleen McCann, *Curator, Primates*  
Peyton West, *Curatorial Intern*  
Rebecca Chapnick, *Office Manager*  
Marietta Kalk, Claudia Wilson, *Collection Managers*  
Michael Lensch, Joseph Mahoney, *Supervisors*  
Michael Gormaley, Amy Hanson, Nicole Rella, Bryan Robidas, *Assistant Supervisors*  
Robert Terracuso, Kris Theis, *Primary Wild Animal Keepers*  
Ralph Aversa, Michelle Blatz, Kitty Dolan, Dominick Dorsa, Gilbert Gordian, Jr., Loraine Hershonik,

Florence Klecha, Kathleen Maclaughlin, Douglas Mase, Joan McCabe-Parodi, Jeffrey Munson, Karen Napolitano, Gina Savastano, Gerard Stark, Jose Vasquez, Martin Zybura, *Senior Wild Animal Keepers*  
Avril Armstrong, Adele Barone, Misha Body, Kathleen Boyce, Travis Brody, Heath Bruscato, Anthony Buffill, Wendy Canino, Margaret Chopak, Francisco Cruz, Katherine D'Andrea, Emily Davidson, Tara Delderfield, Brian DiGiralamo, Juliet Elkins, Glenn Ferguson, Carlos Flores, Joel Forgione, Margaret Franchi, Nicole Furina, Mary Gentile, Amy Golden, Tracy Hazan, Gregory Heim, Maria Hertneck,

Danielle Hessel, Hulya Israfil, Kenneth Jones, Vanessa Jones, Brenda Kramer, Crista Kugler, Ann McCaffrey, Michelle Medina, Elizabeth Metzger, Elizabeth Mills, Nichole Morabito, Douglas Morea, Keri Nugent, Jonathan Perez, Noel Pierriello, Hope Pinckney, Brian Putman, Phillip Reiser, Nancy Rogers, Jason Rowe, Chris Salemi, Elena Shulzhenko, Andrew Spence, Sabrina Squillari, Monika Stroeber, Anneke van Renesse, Jamie Vezbicke, Cathy Vitale, Kelly Wallis, David Wreck, Ferdi Yau, *Wild Animal Keepers*  
Matthew Vara, *Supervising Park Maintainer*



Lawrence Derasmo, *Assistant Maintainer*  
Rosanne Sembler, *Supervising Secretary*

#### **Ornithology**

Christine Sheppard, *Curator*  
Eric Edler, *Collection Manager*  
Marcia Arland, *Assistant Collection Manager*  
Patricia Cooper, Nancy Gonzalez, Mark Hofling, Kurt Hundgen, Emily Ladwig, Susan Leiter, Frank Paruolo, Yvetta Pokorny, Paul Zabarauskas, *Senior Wild Animal Keepers*  
Kristi Bruce, Myra Dremeaux, Gigi Giacomara, Thomas Heinimann, Tasha Hook, Mike Hugenin, Mary Iorizzo, Tim Mohl, Alana O'Sullivan, Jeremy Sanders, Ramsay Thom, Brian Tierney, Michael Williams, Julianne Wohler, Debra Wolfe, *Wild Animal Keepers*  
Mary Evans, *Departmental Assistant*

#### **Herpetology**

John Behler, *Curator*  
William Holmstrom, *Collection Manager*  
Samuel Lee, *Senior Wild Animal Keeper*  
Joseph Abene, Frank Indiviglio, Melissa Mohring, Lisette Ramos, *Wild Animal Keepers*  
Gail Bonsignore, *Supervising Secretary*

#### **Animal Management Services**

Nilda Ferrer, *Associate Curator and Registrar*  
Helen Basic, Anne Rockmore, *Animal Records Specialists*  
Mariluz Vazquez, *Data and Technical Support Assistant*  
Carmen Guzman, *Animal Shipping Coordinator*

#### **Wildlife Information Services**

Steve Johnson, *Manager*  
Dale Boles, *Information Services Librarian*  
Dianne Conner, Eva Raj, *Library Assistants*

#### **Operations**

Mitchel Greene, *Vice President*  
Kenneth Hutchinson, *Deputy Director*  
Richard Luniewski, *Assistant Director*  
Paul Skarbowsky, *Project Manager*  
Michael Santomaso, *General Foreman*  
Amie Merlino, *Executive Assistant*

#### **Construction**

Jose Baez, Parmanand Kesraj, Anthony Laino, Thomas Reilly, Louis Scandole, Marconi St. Hill, Robert Stillwell, *Supervising Maintainers*  
Walter Almodovar, Anthony Bigone, James Byrne, Benedetto Cardillo, Kevin Corbett, Joseph

Corry, Francis Cushin, Lawrence D'Erasmo, Nelson Flecha, Elvis Gomes, Robert Gonzalez, Alfred Hart, John Illenye, Gregory Kalmanowitz, Roopnarine Maharaj, Jose Martinez, Ramon Mendoza, Alison Modeste, Winston Newton, Nicholas Peronne, Nelson Prado, Onix Santana, Robert Santarelli, Renzo Scarazzini, Edward Scholler, Nathaniel Torres, Carlos Yera, *Maintainers*

#### **Maintenance**

Raymond Kalmanowitz, *Superintendent*  
Frank Suarino, *Assistant Superintendent*  
Wayne Harris, *Park Foreman*  
Johnnie Ferreira, *Supervising Maintainer*  
Betzaida Colon, *Secretary*  
Anthony Corvino, *Supervising Maintainer*  
John Tralongo, *Park Maintainer*  
William Castro, Jr., Abraham Crespo, Orlando Fueroa, Gabriel Gomez, Santos Gonzalez, Othniel Gulley, Randy Kyrk, Mary Martin, Jose Raul Rivera, Michael Sbarbori, Justin Smith, *Assistant Maintainers*  
Maria Maldonado, *Senior Attendant*  
Alberto Bonilla, John Bruno, Jr., Migdalia Cordero, Peter Drosopoulos, Maria Estrada, Jeanette Goines, Porfirio Gutierrez, Carmen Guzman-Caraballo, Keith Harris, Demond Jones, Sonia Kalmanowitz, Louis Landi, Carmen Montalvo, Manuel Moura, Maria Muniz, Eduardo Nelson, Pax Nunez-Cacho, Jose Palacios, Gerard Palinkas, Niurka Ramos, Marta Rivera, Natividad Ruiz, Eduardo Vidal, Raymond Zelenka, *Attendants*  
Manuel Garcia, *Supervising Motor Vehicle Operator*  
Kevin Griffin, Joseph Gutleber, George Izquierdo, Juan Peralta, *Motor Vehicle Operators*

#### **Cogeneration**

Michael Henry, *Manager, Electric Services*  
Alfred Jensen, *Supervisor*  
Mark Anderson, Dave Bailey, Farouk Baksh, Hervan Brown, Edwin Otero, Keith Reynolds, *Maintainers*

#### **Horticulture**

Ray Oladapo-Johnson, *Curator*  
Wayne Bourdette, *Manager*  
Gregory Smith, *Supervisor*  
Linda Braidwood-Ferry, James Coelho, Stuart Goldstein, Robert Herkommer, David Hyde, Juan Albert Peralta, *Gardeners*  
James Burns, Anthony Quaglia, David Rosenthal, *Maintainers*  
Shizuko Aiseki McElliot, Megan Cassidy, Paul Fialkovic, Lloyd Pearson, *Assistant Maintainers*

#### **ADMISSIONS AND TRANSPORTATION**

Sean McAllister, *Director*  
Phyllis Fritz, *Assistant Director*  
Al Clapsaddle, *Manager of Admissions Administration*

#### **Bronx Zoo Admissions**

Melanie Coley, *Manager*  
Wilson Fenty, Frank Muccioli, Chris Papaleo, *Supervisors*  
Marilyn Mathurin, *Department Assistant*  
Roberto Oquendo, Norman Ross, Mildred Vargas, *Ticket Agents*

#### **Transportation**

Barrington Burgess, *Manager*  
James Fitzgerald, Kevin Franqui, Maryann Ruberto, *Supervisors*

#### **Monorail**

Wayne Gura, *Manager*  
Christopher Filomio, *Assistant Manager*  
Sandra Nino-Franqui, *Supervisor*

#### **New York Aquarium**

**Admissions and Parking**  
Joseph Minieri, *Manager*  
Florence Goldberg, *Ticket Agent*

#### **WILDLIFE HEALTH SCIENCES**

Robert Cook, *Chief Veterinarian and Vice President*  
Joanne Ciuti, *Office Manager*  
Susan Cardillo, Lisa Eidlin, *Hospital Supervisors*  
Deborah F. Harris, *Pathology & Clinical Records Secretary*

#### **Clinical Care**

Paul Calle, Bonnie Raphael, *Senior Veterinarians*  
Terry M. Norton, *Clinical Veterinarian, St. Catherine's Wildlife Survival Center*  
Stephanie James, *Associate Veterinarian*  
Robert Moore, *Assistant Veterinarian*  
Kristine Smith, *Clinical Resident*  
Eric Baitchman, *Pfizer Clinical Resident*  
Pamela Manning Torres, Nina Palmer, *Senior Veterinary Technicians*  
Peter Psillas, *Veterinary Technician*  
Dolores Sanginito, *Clinical Secretary*

#### **Pathology**

D McAloose, *Department Head*  
Martin Busch, Julie White, *Associate Pathologists*  
Alfred Ngbokoli, *Laboratory Supervisor*  
Andre D. Jules, *Histotechnician*  
Patricia Walsh, *Pathology Technician*

#### **Field Veterinary Studies**

William Karesh, *Director and Field Veterinarian*  
Lisa Starr, *Program Coordinator*  
Angela Yang, *Program Assistant*  
Veronica Greco, *Veterinary Technician*

Steven Ososky, *Senior Policy Advisor/Wildlife Health*  
Issa Bedjabaga, *Gabon Laboratory Technician*  
Michael Kock, Marcela Uhart, *Latin America Field Veterinarians*  
Carolina Marull, *Argentina Wildlife Health Fellow*  
Rodolfo Nillar Gutierrez, *Bohvia Field Veterinarian*  
Patricia E. Reed, *Africa Field Veterinarian*  
Kathy Quigley, *Western States Veterinary Coordinator*

#### **Animal Commissary**

Joseph Briller, *Manager*  
Moruf Egbo, Michael Marano, *Senior Wild Animal Keepers*  
Alfredo Hernandez, John Andrew King, *Wild Animal Keepers*  
Roberto Wright, *Zoo Park Maintainer*  
Michael Cruz, Guillermo Guzman, *Assistant Zoo Maintainers*

#### **Human Health Services**

Dorothy M. Keane, *Nurse Manager*  
Mary Agoglia, *Nurse*

#### **Pest Control**

Anthony Boodoo, *Manager*  
Patrick Doran, Joseph White, *Certified Applicators*

#### **EXHIBITION AND GRAPHIC ARTS**

John Gwynne, *Vice President, Chief Creative Officer*  
Susan Chin, *Director, Planning & Design*  
Eileen Cruz-Minnis, *Manager, Administration*  
Fiona Bayly, *Executive Assistant*  
Christina Brand, *Department Assistant*  
Lorraine Cohen, *Project Assistant*

#### **Architecture, Exhibition Design and Production**

Walter Deichmann, *Creative Director, Exhibits*  
Philip Drew, *Senior Project Designer*  
Jenny Lee, Brian Morrissey, *Project Managers*  
Jon Dohlin, *Assistant Project Director*  
Phillip Pond, *Architectural Designer*  
Sara Tsiropinas, *Junior Architectural Designer*  
Zarnaz Fouladi, *Junior Architectural Intern*  
Shane LeClaire, *Architectural Intern*  
Gary Smith, *Senior Manager, Exhibit Production*  
Matthew Aarvold, Jean Kolody-Egel, *Senior Exhibit Specialists*  
Carolyn Fuchs, Nelson Prado Jr., Anthony Rodgers, Joseph Wilson, *Exhibit Specialists*  
Ruth Marshall, *Exhibit Sculptor*

#### **Interpretive Programs, Graphic**

**Design and Production**  
Johnny Fraser, *Director, Interpretive Programs*

# wcs staff

Zipora Fried, Sharon Kramer-Loew,  
*Creative Directors, Graphics*  
Sitara Cave, *Manager, Public*  
*Interpretation*

Paxton Barnes, *Exhibit Developer*  
Paul Heyer, *Manager, Exhibit*  
*Production*

Kimio Honda, *Senior Graphic*  
*Designer*

Douglas Allen, George Dremeaux,  
Nancy Fischer, Vanah Harris, Staci  
McKeown, Laura Sylvester, Amanda  
Wilson, *Graphic Designers*

Helene Alonso, Julia Lin, Eric Van,  
Alexander Wolf, *Graphic*  
*Interns*

Nelson Then, *Production*  
*Coordinator*

Christopher Maune, *Supervisor,*  
*Graphic Production*

Donald O'Leary, William Rios,  
Lawrence Yoches, *Graphic*  
*Specialists*

## **New York Aquarium Exhibits and Graphic Arts**

Dennis Ethier, *Manager*

Yuliya Stanislovski, Jason Watson,  
*Graphic Designers*

Sandra Halvorsen, *Graphic Intern*  
Brian Donnelly, *Exhibit Artist*  
Michael Sukys, *Exhibit Specialist*

## **Central Park Exhibits and Graphic Arts**

Julie Zolot, *Graphic Designer*

## **SPECIAL ANIMAL EXHIBITS AND OPERATIONS**

**Children's Zoo, Butterfly Zone,  
and Animal Rides**

Suzanne Daley, *Operations*  
*Supervisor*

Ruth Ianuzzi, Diana Tancredi,  
*Supervisors*

James Dauterman, Stephanie  
Derkash, Shakira Paula, *Assistant*  
*Supervisors*

Patricia Ortiz, Luke Torres, *Senior*  
*Animal Facilities Aides*

## **Safari Greeter Program**

Linda Wied, *Assistant Supervisor*

## **Bronx Zoo Security**

Walter Silbert, *Manager*

Raynor Mattson, *Assistant*  
*Manager*

Thomas Rodahan, *Supervisor*

Luis Barreto, Steven Carr, Steven  
Pippa, Gregory Upshaw, James  
Williams, *Park Maintainers*

Haseeb Baksh, Jimmy Barreto,  
Michael Burns, Ivonne Collazo,  
Weston Hill, Bernardo Nelson,  
Jesus Padilla, Gary Robinson,  
Robert Rosario, Kennedy Samuels,  
Donald Thompson, Sue  
Whitstye, Ralph Zamboli,  
*Assistant Park Maintainers*

## **NEW YORK AQUARIUM**

Paul Boyle, *Director*

Cynthia Reich, *Deputy Director*

Barbara Newman, *Project Assistant*  
*to the Director*

Joan Shovlin, *Project Assistant*

## **Animal Husbandry**

David DeNardo, *General*

*Curator/Director of Animal*  
*Operations*

Paul Sieswerda, *Aquarium Curator*

Paul Loiselle, *Associate Curator,*  
*Freshwater Fish*

Kevin Walsh, *Director of Training*  
Martha Hiatt, Guenter Skammel,  
*Senior Trainers*

Patricia Bulko, Kristin Gragnano,  
Christine Groschesky-Bowie,  
*Trainers*

Joanne Sottile, *Animal Enrichment*  
*Intern*

Hans Walters, Michael Morgano,  
*Supervisors*

JoAnne Basinger, Frank Greco,  
Leslie Leffler, Wayne Stempler,  
*Senior Keepers*

Jamie Atwell, Cheryl Balsamo,  
Nicole Carroll, Mike Duggan,  
Gina Fisher, Brenda Frost, Tracey

Horacek, Amy Messbauer,  
Stephanie Mitchell, Paul Moylett,  
Nicole Pisciotta, Sal Puglia, *Keepers*

Catherine McClave, *Laboratory*  
*Manager*

Jeanne Smith, Susan Ursitti,  
*Laboratory Technicians*

Patricia Toledo, *Assistant*  
*Laboratory Technician*

Mary Messing, *Administrative*  
*Assistant, Librarian*

Dick Blankfein, *Dive Safety*  
*Officer/Volunteer Dive Program,*  
*Animal Husbandry, and OLMS*  
*Volunteer Coordinator*

## **Operations, Facilities, and Exhibit Fabrication**

Mitchel P. Greene, *Vice President*

Dennis Ethier, *Director*

Melvin Pettit, *Manager, Facilities*

John Moore, William Sheehan,  
David Sheurich, Michael Tine,  
*Supervising Maintainers*

Michael Budney, Richard Bullen,  
Richard DiStefano, Raul

Domenech, Alfred Escalera,  
Michael Facciolo, Winstrol  
Hosein, Timothy Magee, Kenneth

Prichett, Ralph Ramos, Fitz-  
Albert Reynolds, Tony Vargas,  
Dennis Walsh, *Maintainers*

Patricia Blydenburgh, Joyce  
Cangley, *Supervisor, Buildings*  
*and Grounds*

Robert Caraballo, Derrick Coleman, José  
Gonzalez, Jarod Hagan, Peter Inesi, Ed  
Lebron, Henry Lighty, Lorena Miranda,  
Deky Ramos, Alicia Shannon, Stanley  
Wasserman, *Attendants*

Janis Robinson, *Administrative*  
*Assistant*

Tonya Thomas, *Clerk*

## **Security**

Sal DeFeo, *Security Manager*

Joseph Knowles III, *Assistant*  
*Manager*

Carlos Martinez, *Supervisor*

Samuel Black, Ricky Jackson, Owen  
Mayhew, *Maintainers*

Diana Barreto, Richard Jarus,  
Kenton Spence, Henroy Thomas,  
Michael Wallace, Hector Weir,  
*Assistant Maintainers*

## **OSBORN LABORATORIES**

### **OF MARINE SCIENCES**

Paul Boyle, *Director, Senior Research*  
*Scientist, Microbial Ecology*

Diana Reiss, *Senior Research*  
*Scientist, Marine Mammal*

*Research Program; Director,*  
*Center for Studies on the*  
*Evolution of Intelligence*

Heidi Lyn, *Research Associate,*  
*Marine Mammal Research*  
*Program*

William Mott, *Director, The Ocean*  
*Project*

Paul Loiselle, *Senior Research Scientist,*  
*Freshwater Conservation Biology*

### **Research Associates**

Andrew Baker, *Coral Biology*  
*& Molecular Ecology*

Betty Borowsky, *Invertebrate*  
*Biology*

John Chamberlain, *Paleobiogeology*

David Franz, *Environmental*

*Biology*

Fred Koontz, *Wildlife Ecology*

William Keene, *Coral Reef Ecology*

Irene Pepperberg, *Animal Behavior*

Vincent Pieribone, *Marine*  
*Molecular Biology*

Martin Schreiber, *Aquaculture*

*and Endocrinology*

John Tancredi, *Ecotoxicology*

Dan Tchernov, *Marine Molecular*  
*Biology*

John Williams, *Marine Bioactive*

*Chemistry*

Amber Alliger, Nicole Carroll,

Rachel Franks, Berrak  
Miraboglu, Hans Walters,  
*Graduate Students*

### **CENTRAL PARK ZOO**

Dan Wharton, *Director*

Elizabeth Brown, *Administrative*  
*Assistant*

Neomi Medina, *Receptionist*

Sandra Alcosser, *Poet-in-Residence*

### **Animal Department**

John Rowden, *Curator*

Yula Kapetanakis, *Assistant*  
*Curator*

Bruce Foster, *Collection Manager*

Anthony Brownie, *Supervisor*

Heather Gordon, Robert Gramzay,  
Kristine Keating, Erin Sermak,  
*Senior Wild Animal Keepers*

Celia Ackerman, Charles Braun,  
Luis Jimenez, Raymond

Maguire, Carmen Pignotti,  
Susan Purtell, Amaury

Quiñones, Naomi Reyes, John  
Roderick, Erin Sermak, Jeremy

Tuschak, Keith Walker, Ferdie  
Yau, *Wild Animal Keepers*

David Autry, *Life Support Systems*

*Technician*

Bernadine Leahy, *Senior Veterinary*  
*Technician*

### **Horticulture**

J. Todd Comstock, *Horticulturist*

John Collins, *Assistant*  
*Horticulturist*

### **Operations and Maintenance**

Robert Gavlik, *Manager*

Arkadiusz Krasuski, *Assistant*  
*Manager*

Igor Laboutov, Mong Lee,  
*Supervising Maintainers*

Wayne Martin, Michael Nedd,  
Marlon Ragbir, Jose Torres,  
*Maintainers*

Angelo Baptista, Alistair Johnson,  
Arkady Guttman, *Assistant*

*Maintainers*

Santa Alequin, Joshua Doval, Crystal  
Kinlaw, Audrey McAllister,

Geraldo Peralta, Valdimir Pierret,  
Tyrone Pinkney, Altagracia

Ronnie, Lakisha Terry, Mary  
Verapen *Attendants*

Edwina Jackson, *Secretary*

### **Security/Admissions**

Thomas Lennox, *Manager*

Frank Cangiarella, Stephen Carey,  
*Assistant Managers*

Fitzroy Neufville, *Maintainer*

John Bohan, Felito Cuevas, Carlton  
Davidson, Alberto Gonzalez,

Marilyn Maldonado, Frederick  
Miller, Nestor Morera, Jaime

Pagan, Everton Pearson, Rob  
Sutherland, Christopher Todd,

Ramanen Veerapen, Eddie Wright,  
*Assistant Maintainers*

### **Admissions**

Sonia Colon, Melissa Lightbourne,  
Sookiah Maharaj, Celvis Rock,  
*Ticket Agents/Cashiers*

### **PROSPECT PARK ZOO**

Don Moore, *Director*

Betty Allen, *Senior Secretary*

### **Animal Department**

Mark Halvorsen, *Assistant*  
*Supervisor*

Kristen Chew, Jennifer Skelley, Frances  
Verna, *Senior Wild Animal Keepers*



Victoria DiPaolo, Tecuma Gittens, Scott Heindl, Astra Kalodukas, Tina Koban, Dennis Maroulas, Daniel Maros, Angela Matthews, Nekia Seaberry, Krista Von Ronne, Andrea White, *Wild Animal Keepers*  
Karen Wone, *Veterinary Technician*  
Debbie Dineman-Keim, *Volunteer Coordinator*  
Emily Pinkowitz, *Outreach Coordinator*

#### **Horticulture**

Kai Hinkaty, *Horticulturist*  
James Russell, *Assistant Horticulturist*

#### **Operations and Maintenance**

Paul Baksh, *Manager*  
Evelyn Alexander, *Secretary*  
Oscar Ceron, Norbert Wescott, *Maintainers*  
Reginald McKenzie, Selwyn Ramnaidu, Martin Ricketts, Chaitram Singh, Richard Toledo, Locksly Walford, *Assistant Maintainers*

Wayne Peters, *Senior Attendant*  
Garvin Chankoo, Elizabeth Chotalal, Luis Cruz, Donell Gatling, Eisha Johnson, Atu Marshall, Ernesto Ortiz, John Richards, Aretha Thompson, *Attendants*

#### **Security**

John Balestrieri, *Manager*  
Thomas Geraghty, *Assistant Manager*  
David Evans, *Supervisor*  
Wilbert Barton, Milton Cameron, Harold Davis, Paul DeJesus, Rogelio Dickens, Jade Dobbs, Michael Fazzino, Vincent Ferguson, Patrick Osagie, Romualdo Vasquez, Milton Williams, *Assistant Maintainers*

#### **Admissions**

Joanne Carillo, Lola Chung, Jennifer Soto, Suhelee Vasquez, *Ticket Agents*

#### **QUEENS ZOO**

Robin Dalton, *Director*

#### **Animal Department**

Scott Silver, *Curator*  
Anne Marie O'Brien, *Administrative Assistant*  
Donna-Mae Nelson, *Supervisor*  
Mark Hall, *Assistant Supervisor*  
Marcy Farley, Marcos Garcia, Dana Vasquez, Raul Vasquez, *Senior Wild Animal Keepers*  
Heath Bruscato, Megan Fries-Kmiotek, Ira Goldman, Paul Kmiotek, Susan Makower, Leonard Martinez, David Morales, Samaly Pastor, James Putnam-Ethimiou, Mark Quadrozzi, Erin Rosebrock, Verna Serra, *Wild Animal Keepers*  
Kimm Koocher, *Veterinary Technician*

#### **Operations and Maintenance**

Jeffrey Blatz, *Supervisor*  
Rafael Genao, Fernando Molina, Bo Yang Tian, *Maintainers*  
Krishna Juman, Eugene Texeira, *Assistant Maintainers*  
Carol White, *Supervising Attendant*  
Krishna Dookran, Myriam Martinez, Carlos Valentin, Angustella Zeko, *Attendants*

#### **Security**

Charles Anton, *Manager*  
Frank Francavilla, *Assistant Manager*  
John Patrissi, *Supervisor*  
Paul Fairall, Leonard Golino, Jason Juman, Anthony Mark, Garfield McEachron, Carlton Nelson, Rafael Nieves, William Rosado, Larry Saunders, Dhando Shankar, Allan Taylor, *Assistant Maintainers*

#### **Admissions**

Tina Anderson, Joanne Crespo, Alicia Prashad, *Ticket Agents*

#### **ST. CATHERINES WILDLIFE**

##### **SURVIVAL CENTER**

Jeffrey Spratt, *Curator*  
Dan Beetem, Jenifer Hilburn, Robert Lessnau, *Senior Zoologists*  
Deborah Belgio, George Middleton, Jennifer Savage, *Zoologists*  
Terry Norton, *Veterinarian*  
Kathryn Lurtz, *Veterinary Technician*  
Kay Zack, *Office Assistant*  
Royce Hayes, *Superintendent, St. Catherines Island*

#### **ENVIRONMENTAL EDUCATION**

Annette Berkovits, *Senior Vice President, The Chauncey Stillman Chair in Wildlife Education*

#### **BRONX ZOO EDUCATION**

Donald C. Lisowy, *Curator*  
Mary DeRosa, *Manager, Support Services*  
M. Kathryn Langworthy, *Divisional Manager, Administration*

#### **GENERAL AUDIENCE AND SCHOOL GROUP PROGRAMS, GRADUATE INTERNSHIPS, TEACHER TRAINING, AND CURRICULUM DEVELOPMENT**

Thomas Naiman, *Director, Curriculum Development and International Education Programs*  
Ann Robinson, *Director, National Programs*  
Jennell Ives, *Assistant Director, National Programs*  
Sydell Schein, *Manager, Program Services*  
Lee Livney, *Manager, Federal Grants; Director, Distance Learning Program*  
Sarah Gruber, *Senior Curriculum Developer*  
Nalini Mohan, *International Teacher Trainer*

Mark Eisenhandler, Jennifer Kaleta, *Teacher Trainers*  
Claire Deroche, *Coordinator, Friends of Wildlife Conservation*  
Ilyssa Gillman, *Manager, Program Development and Instruction*  
Ronald Griffith, *Senior Instructor*  
Danielle Forlano, *Secondary Instructor*  
Joanna Cagan, Anthony Cogswell, Tracy Kaminski, Gabrielle Kushner, Kim Van Mourik, *Elementary Instructors*  
Kathleen LaMartina, *Education Programs Liaison*  
Yvonne Morgan, *Program Registrar*  
Cayra Carroll, *Divisional Administrative Assistant*  
Carlos Rosado, *Administrative Assistant*  
Erin Fitzgerald, *Distance Learning Instructor*  
Jeanine Silversmith, *Coordinator, Girls for Planet Earth Program*  
Judith Unis, *Coordinator, Project TRIPS; Coordinator, Project PRISM*

#### **NEW YORK AQUARIUM EDUCATION**

Merryl Kafka, *Curator*  
Lisa Mielke, *Assistant Curator*  
Robert Cummings, *Senior Instructor*  
Michelle Stagnitta, *Instructor Field Programs*  
Melissa Carp, *Instructor*  
Gary Holliday, *Coordinator, Outreach Services*  
Susan Ruocco, *Volunteer Coordinator*  
Maria Zampella, *Secretary*  
Polly Catanzaro, *Senior Reservationist*

#### **CENTRAL PARK ZOO EDUCATION**

Robert Sikora, *Curator*  
Bonnie Bromberg, Nicole Greevy, *Instructors*  
Jane Donnelly, *Volunteer Coordinator*  
Jonathan Eilers, *Senior Instructor, Theater Coordinator*  
Miriam Hernandez, *Secretary and Registrar*

#### **PROSPECT PARK ZOO EDUCATION**

Nancy Schwartz, *Curator*  
Janice Martin, *Secretary and Registrar*  
Emily Pinkowitz, *Community Outreach Coordinator*

#### **QUEENS ZOO EDUCATION**

Thomas Hurtubise, *Curator*  
Paulette Torres, *Secretary and Registrar*  
Lauraine Merlini, *Community Outreach Coordinator*

#### **INTERNATIONAL CONSERVATION**

John Robinson, *Senior Vice President and Director, Joan O. L. Tweedy Chair in Conservation Strategy*

Additional staff: Elizabeth Babcock, Tiffen Baker, William Banham, Elizabeth Bennett, Michael Berens, Angelica Capeci, Jesse Chapman, William Conway, Clarissa Cylich, Louis D'Souza, Phaedra Doukakakis, Matthew Hatchwell, Ken Kostel, Cameron Land, Todd Olson, Meade Love Penn, Laura Perozo, Ellen Pikitich, Christine Santoro, Martha Schwartz, Emilia Valtcheva, Ray Victorine

#### **AFRICA PROGRAM**

James Deutsch, *Director*  
Jefferson Hall, Graeme Patterson, *Assistant Directors*  
*Field Team:* Frank Amsini, Lanto Andriampianina, Philippe Auzel, Bruno Baert, Thomas Barbry, Sultana Bashir, André Baumgarten, Julian Bayliss, Martha Bechem, Inogwabini Bila-Isia, Steve Blake, Nicholas Blondel, Nancy Bwalya-Mubumbuta, Rene Byers, Chewee Cephas Eric Chehoski, Lori Cohen, Jean Gael Collomb, Pete Coppolillo, Helen Crowley, Bryan Curran, Tim Davenport, Daniela DeLuca, Yirmed Demeke, Andy Dunn, Paul Elkan, Sarah Elkan, Charles Foley, Lara Foley, Roger Fotso, Laurence Frank, Norbert Gami, Mark Gateley, John Hart, Terese Hart, Philippe Henschel, Francois Hiol Hiol, David Hoyle, Omari Ilambu, Michael Jacobs, Kath Jefferey, Keith Kabengele, Gilson Kaweche, Emmanuel Kayomba, Judy Knight, Scovia Kobusingye, Lisa Korte, Akoi Kouadio, Sally Lahm, Dale Lewis, Innocent Liengola, Erik Lindquist, Sophy Machaga, James MacKinnon, Fiona Maisels, Jean-Remy Makana, Michel Masozera, Susan Matambo, Steil Matthew, Alastair McNeilage, David Meyers, Jerome Mokoko, Ludovic Momont, David Moyer, Noah Mpungu, Leonard Mubulama, Nicole Muloko-Notoutome, Ian Munanura, Patricia Mupeta, Robert Mwinyihali, Mercy Nambo, Lisa Naughton, Anthony Nchanji, Dominic Ngwesse, Tomo Nishihara, Louis Nkambe, Eno Nku, David Nkuutu, David Nzouango, John Oates, William Olupot, Nigel Orbell, Ferrel (Loki) Osborn, Richard Oslisly, Han Overman, Isaiah Owunji, Guy Parker, Richard Parnell, Linda Percy, Andrew Plumtre, Amy Pokempner, Josh Ponte, Colby Prevost, Bosco Pourmogon, Hugo Rainey, Herilala Randriamahazo, Luccianie Raonison, Quentin Robb, Cathy Schroeder, Kirstin Siex, Ginette Spinhoven-Kombele, Erica Spotswood, April Stanley,

# wcs staff

Malcolm Starkey, Matthew Steil, Emma Stokes, Terry Sunderland, Jacqui Sunderland-Groves, Richard Tshombe, Andrea Turkalo, Hilde Van Leeuwe, Lee White, Chris Wilks, Liz Williamson, Monica Wrobel, Moise Zoniaba

## ASIA PROGRAM

Joshua Ginsberg, *Director*  
Linda Krueger, *Assistant Director*  
*Field Team:* Harry Alexander,

Noviar Andayani, Datta Aparajita, Nigel Barton, Klos Boonthawee, Nick Brickle, Akanisi Cagitoba, Hong Chamnan, Cynthia Chin, Raghu Chundawat, Tom Clements, Etienne Delattre, Malykham Doungdala, Will Duckworth, Asri A. Dwiyahreni, Tom Evans, Linda Farley, Camilla Fritze, Banak Gamui, David Gaveau, Vidiro Gei, Fred Goes, John Goodrich, Antonia Gorog, Melvin Gumal, Donny Gunaryadi, Yok Yok Hadiprakarsa, Troy Hansel, Michael Hedemark, Simon Hedges, Doug Hendrie, Andrea Heydlauff, Jaso Hon, Paul Igag, Arlyne Johnson, Aili Kang, Ullas Karanth, Todd Katzner, Nikolai Kazakov, U Saw Tun Khaing, Mayoor Khan, Long Kheng, Rose King, Margaret Kinnaird, Ajith Kumar, U Kyau Thinn Latt, Rob Lee, Eve Li, Tony Lynam, Andrew Mack, M.D. Madhusudan, Petch Manopawitr, Mike Meredith, Dale Miquelle, U Than Myint, Dwi Adhiasto Nugroho, Tim O'Brien, David Olson, Kirk Olson, Muse Opiang, John Paczkowski, Colin Poole, John Poulsen, Didik Purwanto, Edi Purwanto, Kathy Quigley, Madhu Rao, Gleb Raygorodetsky, Jessica Rogers, June Rubis, Katayo Sagata, Mochamad Saleh, Betani Salusalu, Tan Setha, Ross Sinclair, Loraini Sivo, Stephen

Siwu, Men Soriyun, Souvany Soumany, Heng Sovannara, Kong Kim Sreng, Mirium Supuma, John Tasirin, U Kyaw Thinn Latt, Moala Tokota'a, Martin Tyson, Soulisak Vannalath, Chantavi Vongkhamheng, Joe Walston, Hariyo T. Wibisono, Untung Wijayanto, Nural Laksmi Winarul, Debra Wright, Peter Zahler, Endi Zhang

## LATIN AMERICA PROGRAM

Avecita Chicchón, *Director*  
Felicity Arengo, *Assistant Director*  
*Field Team:* Anarita Alves, Ricardo Baldi, James Barborak, Richard Bodmer, Dee Boersma, Mario Boza, Claudio Campagna, Romina Capelli, Archie Carr III, Eduardo Carrillo, Oscar Castillo, Sandra Cavalcanti, Sandra Ceziani, Silvia Chaludian, Felix Daza, Peter Feinsinger, Estaban Frere, Patricia Gandini, Amanda Garcia, Isaac Goldstein, Graham Harris, Patricia Harris, Peter Hodum, Amanda Jorgenson, Jeffrey Jorgenson, Gustavo Kattan, Silvio Marchini, Fernanda Marques, Roan McNab, Bruce Miller, Carolyn Miller, Carolina Murcia, Andrew Noss, Andres Novaro, Matthew O'Brien, Jose Ochoa, Michael Painter, Lilian Painter, Jocelyn Peskin, Carlos Quintela, Christine Rastas, Omar Rocha, Alexandra Rojas, Damian Rumiz, Catherine Sahley, Adrian Schiarini, Andrew Taber, Alejandro vila, Robert Wallace, Pablo Yorio

## MARINE PROGRAM

Liz Lauck, *Acting Director*  
*Field Staff:* Rizya Ardiwijaya, Andrew Baker, Jon Ben, Ramon Bonfil, Cathi Campbell, Stuart Campbell, Rebecca Cerroni, John Clamp, Brie Cokos, Tim Collins, Caterina D'Agrosa, Daniel Erickson, Janet Gibson, Kate Hanson, Simon Harding, Yudi Heridiana, Sergio Hoare, Nanajo Jonahson, Cynthia Lagueux, Joseph Maina, Michael Mamane, Tim McClanahan, William McCoy, Ahmed Mukminin, Nyawira Muthiga, Shannon O'Brien, Shinta Pardede, Bemahafaly Randriamantsoa, Yvette Razafindrakoto, Howard Rosenbaum, Brian Smith, Katia Suero-Hendrix, Dipani Sutaria, Danny Wesby, Joni Wibowo, Celia Zelaya

## NORTH AMERICA PROGRAM

William Weber, *Director*  
Jodi Hilty, *Assistant Director*  
*Field Staff:* Jon Beckmann, Joel

Berger, Kim Berger, Brent Brock, Polly Buotte, Jeff Burrell, Cheryl Chetkiewicz, Hilary Cooke, Cecily Costello, Kerry Farris, Keyt Fischer, Kerri Frangioso, Michale Glennon, Dawn Greene, Craig Groves, Leila Hadj-Chikh, William Harrower, Brian Houser, Kristine Inman, Robert Inman, Jerry Jenkins, Leslie Karasin, Andy Keal, Michael Klemens, Heidi Kretser, Joe Liebezeit, Sean Matthews, Tony McCue, William McShea, Nick Miller, Lisa Naughton, Jesse Newby, Larry Niles, Kathy O'Hara, Justina Ray, Jon Rieck, Toni Ruth, Abigail Sarmac, Amy Sauer, Michael Sawaya, Jennifer Schmitz, Nina Schoch, Hope Sieck, Boone Smith, Zoë Smith, Sylvia Stone, Kendall Watkins, John Weaver, Noah Weber, Rachel Wigglesworth, Gillian Woolmer, Steve Zack, Joanna Zigouris,

## LIVING LANDSCAPES PROGRAM

Amy Vedder, *Vice President*  
*Additional Staff:* Karl Didier, Jessica Forrest, Danielle LaBruna, Nick Raitelu, Eric Sanderson, Samantha Strindberg, Yemi Tessema, Adrian Treves, David Wilkie

## WCS INSTITUTE

Orietta Brewer, Marcia Brown, Janice Davis, Sharon Guynup, Richard Margoluis, Kent Redford, Nick Salafsky, Caroline Stern

## SCIENCE AND EXPLORATION PROGRAM

George Schaller, *Vice President*, Ella Milbank Fosby *Chair in Wildlife Conservation*  
Alan Rabinowitz, *Director*  
*Additional Staff:* Kathleen Conforti, Michael Fay, Denise Guerra, Maurice Hornocker, Luke Hunter, John Thorbjarnarson

## DEVELOPMENT AND MEMBERSHIP

Maria Masciotti, *Senior Vice President*  
Carolyn Bronson, *Executive Assistant*  
Grace Ragone, Mary Ann Venticinque, *Office Clerks*

## INSTITUTIONAL DEVELOPMENT

Lisa Synoradzki, *Director*, Institutional Support  
Dale Ann Brooks, *Director*, Corporate Relations and Special Events  
Susan Cooper, *Assistant Director*, Development and Membership IS  
Mary Beth Gaffney, *Associate Manager*  
David Cartwright, *Associate Manager*, Foundations

Phyllis Geraghty, *Administrative Assistant*  
Patricia Berry, *Development Services Assistant*

## MAJOR GIFTS AND PLANNED GIVING

Patricia B. Park, *Director*, Major Gifts  
Rebecca Bean, *Assistant Director*, Planned Giving and Stewardship  
Carolyn Gray, *Assistant Director*, Communications  
Abigail Hourwich, *Manager*, Research  
Adah Sylvan, *Manager*, Major Gifts  
Riam Sarah Knapp, *Associate Manager*, Major Gifts and Annual Patrons Program  
Chandra Towers Blatt, *Assistant Manager*, Planned Giving  
Michelle Kahn, *Assistant Manager*, Special Events  
Mary Ann Spadacini, *Secretary*, Individual Support  
Ann Phelan, *Secretary*

## INTERNATIONAL CONSERVATION PROGRAM SUPPORT

Susan Hannah, *Director*  
Sophia Primps, *Associate Director*, Major Gifts  
Olivia van Melle Kamp, *Assistant Director*, National Support  
Linde Ostro, *Assistant Director*, Foundation Support  
Susan Monserrat, *Consultant*, Foundation Support  
Ken Shallenberg, *Assistant Manager*, International Foundation Support  
Stacy Szweczyk, *Associate Manager*, Individual Support  
Silvina Weilmuller, *Assistant Manager*, National Support  
Pat Cronin, *Secretary*, National Support  
Felicia Hamerman, *Assistant Manager*, International Support

## MEMBERSHIP

Shari Romar, *Director*  
Kathleen Allard, *Manager*, Membership Services  
Meredith Buono, *Assistant Manager*  
Laura Lauria, *Assistant Manager*, Membership Programs  
Lincoln O'Brien, *Coordinator*, Membership Communications  
Lynette Ardis, *Manager*, Site Sales  
Thomas Traegler, *Supervisor*, Site Sales, Bronx Zoo  
Kendra Whitmore, *Assistant Supervisor*, Site Sales, Bronx Zoo  
Lindsay Baiato, *Assistant Supervisor*, Site Sales, Aquarium  
Cynthia Alleyne, *Coordinator*, Membership Services  
Annette Jeremia, *Associate Coordinator*, Membership Services  
Dorothy Moura, *Assistant Coordinator*, Membership Services





Dianna Russell, *Membership Services Assistant*

## FINANCIAL AND ADMINISTRATIVE SERVICES

Patricia Calabrese, *Senior Vice President and Chief Financial Officer*

Robert Calamo, *Director, International Financial Systems Project*

Linda McKeiver, *Executive Assistant*  
Evans Randolph, Gerard Tibbs, *Mailroom*

## BUDGET AND FINANCIAL PLANNING

Sarah Gillman, *Vice President*  
Regina Burke, *Assistant Director*  
Cecile Koehler, *Manager*

## FINANCIAL SERVICES

John Hoare, *Vice President and Comptroller*

Ronald Ventarola, *Assistant Comptroller*  
Gwendolyn Cleary, *Chief Accountant*  
Albert Corvino, *Director, Restricted Fund and Government Grants Accounting*

Lori Bueti, *Executive Secretary*  
Talia Ann Aliberti, *Payroll Manager*  
Joan Jones, *Accounts Payable Manager*

Howard Forbes, *Manager, Cashroom, Guest Services Accounting*  
Linda Asbary, *Supervising Accountant*

Alicia Wyatt, *Senior Accountant*  
Jacklyn Bui, Michael Regan, *Accountants*

Donna M. Marano, Michelle Mora, Isobel Onorato, Delores Papaleo, *Supervisors*

Sonya Meltzer, Maureen Salvatto, *Senior Clerks*  
tina Antinoro, Ernesto Banaag, Thomas Ferrara, Rose Gilberti, Madurie Kowlasar, Jean McNally, Annabelle Olmeda, Jacqueline Sgueglia, Yadiera Torres, *Clerks*  
Julienne Hollingsworth, Irene Martinez, Vivian Villa, *Cashiers*

## HUMAN RESOURCES

Miriam Benitez, *Vice President*  
Zulma Rivera, Garnet Vaccaro, *Assistant Directors*  
Richard Sowinski, *Safety Director*  
Carolyn Angiolillo, *Manager*  
Laura Katsanos, *Representative*  
Isalene Harris, Monique Santiago, *Administrative Assistants*  
Hayat Moreno, *Clerk*  
Richard Steck, *Supervisor, Switchboard*  
Emilia Valtcheva, *Coordinator, International*

## INTERNATIONAL SERVICE CENTER

Robert Calamo, *Director*  
Rachel DeGregorio, *Manager, Field Accounting/Budgeting*  
Peggy O'Shaughnessy, *Manager, Financial Systems Project*  
Louis D'Souza, Laura Perozo, *Finance Managers*

Angelica Capeci, *Grants Manager*  
Clarissa Cylich, *Budget Manager*

## PURCHASING

James Morley, *Director*  
Frances Lupo, *Supervisor*  
Walter Aufseeser, *Purchasing Agent*  
Brenda Diaz, *Purchasing Specialist*  
Jezabel Cordova, Gina Liranzo-Estrada, *Clerks*

## BUSINESS SERVICES

Robert Moskovitz, *Vice President*  
Patrick Murphy, *Manager, Finance and Administration*  
Robert DiCesare, *Manager, Systems*  
Helen Browning, Ileana Figueroa, Maureen Garvey, Yvonne McNeill, *Administrative Assistants*

## Restaurants

Gerard Buter, *Director*  
Antonio Vidal, *Executive Chef*  
John Lipari, *Kitchen Manager*  
Martine Arora, *Area Manager*  
Tarik Castro, Angella Modeste, Melanie Otero, Wanda Zavala, *Area Supervisors*  
Tony Urrico, *Storekeeper*  
Virginia Castaldi, Brenda Williams, *Unit Managers*  
Virgin Colon, Celenia Garcia, *Assistant Unit Managers*  
James Coleman, Rodney Rollins, *ACE Specialists*

## Merchandise

Mike Casella, *Director*  
Rosanne Pignatelli, *Merchandise Manager*  
Carol Johnston, Valerie McKee, Margaret Murphy, *Area Managers*  
Charles Braithwaite, Joanna Duran, Denise Guzman, Evelyn Valdes, *Area Supervisors*  
James Lo, *Storekeeper*  
Nancy Izquierdo, Maria Ortega, Patricia Peters, *ACE Specialists*  
Albert Martinez, Margarita Miranda, Laura Moret, James Vazquez, *Senior Associates*

## New York Aquarium

*Business Services*  
Niko Radjenovic, *Associate Director*  
Georgia Burke, *Area Manager, Merchandise*  
Derrick Clarke, *ACE Specialist, Merchandise*  
George Gaspar, *Area Supervisor, Restaurants*  
Rocco Turco, *Unit Manager, Restaurants*  
Cynthia Browne, *Assistant Unit Manager, Restaurants*  
Audra Browne, *Administrative Assistant*

## PUBLIC AFFAIRS

John Calvelli, *Senior Vice President*  
Jan Kaderly, *Assistant Director, Planning and Budget*

## GOVERNMENT AFFAIRS

Charles Vasser, *Director, Community Affairs*  
Sara Marinello, *Assistant Director, Federal and State Relations*  
Rosemary DeLuca, *Manager, Municipal Relations*  
Kevin Garrellick, *Associate Manager, Grants*  
Marla Krauss, *Associate Manager, WCS/NOAA Regional Partnership*  
Denise Browne, *Executive Assistant*  
Diana Blackwell, *Administrative Assistant*

## Washington, DC, Office

Kelly Keenan-Aylward, *Associate Manager, Federal Affairs*  
Monique Dnaziger, *Federal Affairs Associate*

## COMMUNICATIONS

Alison Power, *Director*  
Maggie Byrne, *Secretary*

## Bronx Zoo Communications

Linda Corcoran, *Assistant Director, NYC Facilities*  
Alison Orenstein, *Associate Manager*  
Mary Record, *Assistant Manager*

## New York Aquarium

Frances Hackett, *Associate Manager, Communications*

## City Zoos

Kate McIntyre, *Assistant Manager, Public Relations*

## Conservation Communications

Stephen Sautner, *Assistant Director*  
John Delaney, *Associate Manager*

## Wildlife Conservation Magazine

Deborah Behler, *Editor-in-Chief*  
Julie Larsen Maher, *Creative Director*  
Nancy Simmons, *Senior Editor*  
Jennifer Shalant, *WCS Copy Editor*  
Carol Burke, *Editorial Manager*  
Joshua Krause, *Production Coordinator*

## MARKETING AND SPONSORSHIP

Tamara Krizek, *Director*  
Kelly Sereno, *Assistant Manager*

## Sponsorship

Samantha Conlan, *Corporate Partnership Manager*

## On-line Services

Marjorie Federici, *Manager*  
Jose Serrano, *Assistant Manager*

## Wildlife Conservation Magazine

Diana Warren, *Account Manager*  
Rhonda Lewis-Warren, *Circulation Manager*

## Group Sales

Margaret Price, *Manager*  
Nicole Nell-Joye, *Associate Manager*  
Venus Ramos, *Assistant Manager*

Mansol Gabnel, *Sales Representative*  
Eliza Lazo, Elsa Perez, *Customer Representatives*

## EVENT MARKETING

Rachel Libretti, *Assistant Director*  
Anthony Petrone, *Associate Manager, Bronx Zoo*  
Susann Holloway, *Manager, Public Affairs, New York Aquarium*  
Leslie Lannon, *Manager, Central Park Zoo*  
Denise Pappalardi, *Associate Manager, Aquarium*  
Jose Serrano, *Associate Manager, Bronx Zoo*  
Heather Bellizzi, *Assistant Manager, Bronx Zoo*  
Lillian Vega, *Assistant Manager, City Zoos*  
Alicia Sells, *Assistant Manager, City Zoos*

## TELEVISION AND MEDIA

Julia Mair, *Vice President*  
Steven Fairchild, *Senior Producer*  
Liz Law, *Manager, Development*  
Andrea Nichols, *Manager, Development*

## Media Services

Thomas Veltre, *Manager*  
Dennis DeMello, *Staff Photographer*  
Diane Shapiro, *Archivist*  
Suzanne Bolduc, *Archive Assistant*  
Luke Groskin, *Production Coordinator*

## INFORMATION TECHNOLOGY

Paula L. Simon, *Vice President, Chief Technology Officer*  
Michael Mariconda, *Director*  
Fran Sorge, *Telecommunications Support Supervisor*  
Arul Chellaraj, *System Administrator*  
Michael Ferrante, *Network Systems Analyst*  
Allegra Hamer, *System Analyst*  
Marco Marvucic, Joseph Padilla, Joel Papierman, *Systems Support Specialists*  
Donna Herrera, *Customer Support Supervisor*  
Byron Patten, *Audio-Visual Technician*  
Susan Acocella, *Secretary*

## OFFICE OF GENERAL COUNSEL

W. B. McKeown, *Senior Vice President and General Counsel*  
Evelyn J. Junge, *Associate General Counsel*  
Rudolfo Arauz, Elizabeth Donovan, *Assistant General Counsels*  
Maria Elena Urriste, *International Legal Advisor*  
Adriane Maisell, *Manager, Legal Services*  
Scott Wight, *Administrative Assistant*

# staff publications

## Articles and Books by WCS Staff and Associates

(A more complete bibliography is available at the Bronx Zoo Library.)

### BEHAVIOR, ETHOLOGY, AND BEHAVIORAL ECOLOGY

- Barrientos, J., and E. Cuéllar. 2003. Radio-telemetría de antas (*Tapirus terrestris*) en el Chaco seco, Izozog, Santa Cruz, Bolivia. In: *Manejo de fauna silvestre en Amazonia y Latinoamérica: selección de trabajos V Congreso Internacional*, Ed. R. Polanco-Ochoa, 140-142. Bogotá, Colombia: CITES, Fundación Natura.
- Borboroglu, Pablo Garcia, and Pablo Yorio. 2004. Habitat requirements and selection by kelp gulls (*Larus dominicanus*) in Central and Northern Patagonia, Argentina. *The Auk* 121, no. 1: 243-52.
- Drea, C. M., and L. G. Frank. 2004. The social savvy of spotted hyenas. In: *Animal Social Complexity and Intelligence*. Eds. F. M. B. de Waal, and P. L. Tyack, 121-48. Harvard University Press.
- Fernandez-Juricic, E., C. Campagna, and D. San Mauro. 2003. Variations in the arrangement of South American sea lion (*Otaria flavescens*) male vocalizations during the breeding season: patterns and contexts. *Aquatic Mammals* 29, no. 2: 289-96.
- Leggett, K.E.A., J. Fennessy, and S. Schneider. 2004. A study of animal movement in the Hoanib River catchment, northwestern Namibia. *African Zoology* 39, no. 1: 1-11.
- Robbins, M. M., and A. McNeilage. 2003. Home range and frugivory patterns of mountain gorillas in Bwindi Impenetrable National Park, Uganda. *International Journal of Primatology*, 24: 467-91.
- Schiavini, A., and A. Raya Rey. 2004. Long days, long trips: Foraging ecology of female rockhopper penguins at Tierra del Fuego. *Marine Ecology Progress Series* 275: 251-62.
- Vega Rivera, J. H., W. J. McShea, and J. H. Rappole. 2003. Comparison of breeding and post-breeding movements and habitat requirements for the scarlet tanager. *The Auk* 120: 632-44.

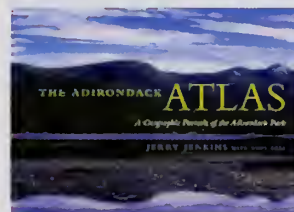


### BOOKS

- Hunter, Luke, and D. Hamman. 2003. *Cheetah*. Cape Town: Struik-New Holland.
- Jenkins, J., and A. Keal. 2004. *The Adirondack Atlas: A Geographic Portrait of the Adirondack Park*. Syracuse: Syracuse University Press and The Adirondack Museum.

### CONSERVATION BIOLOGY

- Berger, Joel. 2003. Is it acceptable to let a species go extinct in a national park? *Conservation Biology* 17: 1451-54.
- Carr, Archie III. 2004. Utopian bubbles: What are Central America's parks for? *Wild Earth* 14, no. 1/2: 34-39.
- Christensen, J. 2004. Win-win illusions. *Conservation in Practice* 5, no. 1: 12-18.
- Deem, S. L., W. B. Karesh, W. Weisman, and M. M. Uhart. 2003. La salud de la vida silvestre en la conservación: Con referencia a América Latina. In: *Manejo de fauna silvestre en Amazonia y Latinoamérica: selección de trabajos V Congreso Internacional*. Ed. R. Polanco-Ochoa, 198-204. Bogotá, Colombia: CITES, Fundación Natura.
- Ginsberg, Joshua. 2004. Enhancement of survival or abandonment



Adrian Treves (top), in the WCS Living Landscapes program, and other staff published books, articles, and papers.

- of the Endangered Species Act? *Bioscience* 54, no. 3: 180-181.
- Miller, Brian, William Conway, and others. 2004. Evaluating the conservation mission of zoos, aquariums, botanical gardens, and natural history museums. *Conservation Biology* 18, no. 1: 86-93.
- Plumptre, Andrew. 2003. Lessons learned from on-the-ground conservation in Rwanda and the Democratic Republic of the Congo. *Journal of Sustainable Forestry* 16, no. 3: 69-88.
- Redford, Kent, and M. A. Sanjayan. 2003. Retiring Cassandra. *Conservation Biology* 17, no. 6: 1473-74.
- Sanderson, Steven E. 2004. Keynote Address to the 7th Biennial Scientific Conference on the Greater Yellowstone Ecosystem, Beyond the arch: Community and conservation in Greater Yellowstone and East Africa. *Yellowstone Science* 12, no. 1: 5-12.
- Weber, Bill. 2004. The arrogance of America's designer ark. *Conservation Biology* 18, no. 1: 1-3.

### ECOLOGY AND FIELD CONSERVATION

- Balirwa, J. S., C. A. Chapman, L. J. Chapman, K. Geheb, L. Kaufman, R. H. Lowe-McConnell, O. Seehausen, J. H. Wanink, R. L.

- Welcomme, and F. Witte. 2003. Biodiversity and fisheries sustainability in the Lake Victoria basin: An unexpected marriage? *Bioscience* 53: 703-715.
- Benstead, Jonathan, Patrick. H. Draham, Jean-Luc Gattoliat, Francois-Marie Gibon, Paul V. Loiselle, Michel Sartori, John S. Sparks, and Melanie L. J. Strassny. 2003. Conserving Madagascar's freshwater biodiversity. *Bioscience* 53, no. 11: 1101-11.
- Berger, Joel. 2004. The last mile: How to sustain long-distance migration in mammals. *Conservation Biology* 18, no. 2: 320-331.
- Calhoun, Aram J. K., and Philip deMaynadier. 2004. Habitat management guidelines for vernal pool wildlife. *Metropolitan Conservation Alliance Technical Paper* no. 6.
- Coppolillo, P. B., H. Gomez, F. Maisels, and R. B. Wallace. 2004. Selection criteria for suites of landscape species as a basis for site-based conservation. *Biological Conservation* 115: 419-30.
- Davenport, T. R. B., E. Lodu, P. C. Howard, and A. J. Plumptre. 2003. Robust chimpanzee *Pan troglodytes schweinfurthii* in Otzi Forest. *African Primates* 5: 46-48.
- Deem, S. L., W. B. Karesh, and M. M. Uhart. 2003. Salud de fauna silvestre en reintroducciones: lo bueno, lo malo y lo evitable. In: *Manejo de fauna silvestre en Amazonia y Latinoamérica: selección de trabajos V Congreso Internacional*. Ed. R. Polanco-Ochoa, 346-49. Bogotá, Colombia: CITES, Fundación Natura.
- Demaria, M. R., W. J. McShea, K. Koy, and N. O. Maceira. 2003. Pampas deer conservation with respect to habitat loss and protected area considerations in San Luis, Argentina. *Biological Conservation* 115: 121-30.
- Druce, D., H. Genis, J. Braak, S. Greatwood, A. Delsink, R. Ketles, L. Hunter, and R. Slotow. 2004. Population demography and spatial ecology of a reintroduced lion population in the Greater Makalali Conservancy, South Africa. *Koedoe* 47, no. 1: 103-18.
- Hall, J. S., D. J. Harris, V. Medjibe, and P. M. S. Ashton. 2003. The effects of selective logging on forest structure and tree species composition in a Central African forest: Implications for management of conservation areas. *Forest Ecology and Management* 183: 249-64.
- Maffei, L., E. Cuéllar, and A. Noss.



2004. One thousand jaguars (*Panthera onca*) in Bolivia's Chaco? Camera trapping in the Kaayá National Park. *Journal of Zoology* 262: 295-304.
- Maisels, F. 2004. Defoliation of a monodominant rain forest tree by a noctuid moth in Gabon. *Journal of Tropical Ecology* 20: 1-3.
- McShea, W. J., J. Pagels, J. Orrock, E. Harper, and K. Koy. 2003. Mesic deciduous forest as patches of small mammal richness within an Appalachian mountain forest. *Journal of Mammalogy* 84: 627-43.
- Mendoza, F., and A. Noss. 2003. Radiotelemetría del peni (*Tupinambis rufescens*) en una zona del Chaco boliviano. In: *Manejo de fauna silvestre en Amazonía y Latinoamérica: selección de trabajos V Congreso Internacional*. Ed. R. Polanco-Ochoa, 178-80. Bogotá, Colombia: CITES, Fundación Natura.
- Mwima, P., and A. McNeillage. 2003. Natural regeneration and ecological recovery in Bwindi Impenetrable National Park, Uganda. *African Journal of Ecology* 41: 93-98.
- Noss, Andrew J., Romoaldo Peña, and Damian I. Rumiz. 2004. Camera trapping *Procyonotus maximus* in the dry forests of Santa Cruz, Bolivia. *Endangered Species Update* 21, no. 2: 43-52.
- Painter, M., A. Noss, R. Wallace, and L. Painter. 2003. El manejo comunitario de fauna en Bolivia: criterios de sostenibilidad. In: *Manejo de fauna silvestre en Amazonía y Latinoamérica: selección de trabajos V Congreso Internacional*. Ed. R. Polanco-Ochoa, 304-16. Bogotá, Colombia: CITES, Fundación Natura.
- Plumptre, A. J., A. McNeillage, J. S. Hall, and E. A. Williamson. 2003. The current status of gorillas and threats to their existence at the beginning of a new millennium. *Gorilla Biology: A Multidisciplinary Perspective*. A. B. Taylor, and M. L. Goldsmith, 414-31.
- Schaller, G. 2004. The Future of the Tiger. In: *Tiger: The Ultimate Guide* by Valmik Thapar, 312-14. New York: CDS Books.
- Schiavini, A. C. M., E. A. Crespo, and V. Szapkievich. 2004. Status of the population of South American sea lion (*Otaria flavescens* Shaw, 1800) in southern Argentina. *Mammalian Biology* 69: 1-11.
- Shivik, J. A., A. Treves, and M. Callahan. 2003. Non-lethal techniques: Primary and secondary repellents for managing predation. *Conservation Biology* 17: 1531-37.
- Silver, S. C., L. E. T. Ostro, L. K. Marsh, L. Maffei, A. J. Noss, M. J. Kelly, R. B. Wallace, H. Gómez, and G. Ayala. 2004. The use of camera traps for estimating jaguar *Panthera onca* abundance and density using capture/recapture analysis. *Oryx* 38, no. 2: 148-54.
- Stuart, Bryan L., and John Thorbjarnarson. 2003. Biological prioritization of countries for turtle conservation in Asia. *Chelonian Conservation and Biology* 4, no. 3: 642-47.
- Walsh, P. D., K. A. Abernethy, and others. 2003. Catastrophic ape decline in western equatorial Africa. *Nature* 422, no. 6932: 611-14.
- ECOTOURISM**
- Grossberg, R., A. Treves, and L. Naughton-Treves. 2003. Incidental ecotourism at Lamanai, Belize. *Environmental Conservation* 30, no. 1: 40-51.
- Kirkwood, R., L. Boren, P. Shaughnessy, D. Szteren, P. Mawson, L. Hückstädt, G. Hofmeyr, H. Oosthuizen, A. Schiavini, C. Campagna, and M. Berris. 2003. Pinniped-focused tourism in the Southern Hemisphere: a review of the industry. In: *Marine Mammals: Fisheries, Tourism and Management issues*. Eds. N. Gales, M. Hindell, and R. Kirkwood, 257-76. Melbourne: CSIRO Publishing.
- HUMAN IMPACT**
- Karasin, Leslie. 2003. All-terrain vehicles in the Adirondacks: Issues and options. *WCS Working Papers* no. 21: 1-64.
- Miller, Nicholas, and Michael W. Klemens. 2004. Croton-to-Highlands Biodiversity Plan. *Metropolitan Conservation Alliance Technical Paper* 7.
- Naughton-Treves, L., R. Grossberg, and A. Treves. 2003. Paying for tolerance: The impact of livestock depredation and compensation payments on rural citizens' attitudes toward wolves. *Conservation Biology* 17: 1500-1511.
- Naughton-Treves, L., J. L. Mena, A. Treves, N. Alvarez, and V. C. Radeloff. 2003. Wildlife survival beyond park boundaries: The impact of swidden agriculture and hunting on mammals in Tambopata, Peru. *Conservation Biology* 17: 1106-17.
- Nyhus, P. J., S. A. Osofsky, P. Ferraro, F. Madden, and H. Fischer. 2004. Bearing the costs of human-wildlife conflict: The challenges of compensation schemes. In: *People and Wildlife: Conflict or Coexistence*. Eds. R. Woodroffe and S. Thirgood. Cambridge: Cambridge University Press.
- Treves, A., and K. U. Karanth. 2003. Human-carnivore conflict and perspectives on carnivore management worldwide. *Conservation Biology* 17: 1491-99.
- Treves, A., L. Naughton-Treves, E. L. Harper, D. J. Mladenoff, R. A. Rose, T. A. Sickley, and A. P. Wydeven. 2004. Predicting human-carnivore conflict: A spatial model based on 25 years of wolf predation on livestock. *Conservation Biology* 18: 114-25.
- HUSBANDRY AND EXHIBITS, BEHAVIORAL ENRICHMENT**
- Loiseleur, P. V. 2003. Captive breeding for the freshwater fishes of Madagascar. In: *The Natural History of Madagascar*. Eds. S. M. Goodman and J. P. Bemstead, 1569-74. Chicago: University of Chicago Press.
- Savastano, Gina, Adele Barone, Danielle Hessel, Vanessa Jones, and Denise Vibal. 2003. New world primate enrichment that is quick, easy and low budget. *Shape of Enrichment* 12, no. 3: 7-9.
- Savastano, Gina, Amy Hanson, and Colleen McCann. 2003. The development of an operant conditioning training program for New World primates at the Bronx Zoo. *Journal of Applied Animal Welfare Science* 6, no. 3: 247-61.
- POPULATION BIOLOGY AND GENETICS**
- Clifford, S. L., N. M. Anthony, M. Bawe-Johnson, K. A. Abernethy, C. E. G. Tutin, L. J. T. White, M. Bermejo, M. L. Goldsmith, K. McFarland, K. J. Jeffery, M. W. Bruford, and E. J. Wickings. 2004. Mitochondrial DNA phylogeography of western lowland gorillas (*Gorilla gorilla gorilla*). *Molecular Ecology* 13, no. 6: 1551-65.
- Kalpers, J., E. A. Williamson, M. M. Robbins, A. McNeillage, A. Nzamurambaho, L. Ndakasi, and G. Mugiri. 2003. Gorillas in the crossfire: Assessment of population dynamics of the Virunga mountain gorillas over the past three decades. *Oryx* 37: 326-37.
- Karanth, K. Ullas, James D. Nichols, N. Samba Kumar, William A. Link, and James E. Hines. 2004. Tigers and their prey: Predicting carnivore densities from prey abundance. *Proceedings of the National Academy of Sciences* 101, no. 14: 4854-58.
- Pistorius, P. A., M. N. Bester, M. N. Lewis, F. E. Taylor, C. Campagna, and S. P. Kirkman. 2004. Adult female survival, population trend, and the implication of early primiparity in a capital breeder, the southern elephant seal (*Mirounga leonina*). *Journal of Zoology* 263, no. 2: 107-19.
- WILDLIFE HEALTH**
- D'Amico-Hales, J., S. A. Osofsky, and D. H. M. Cumming. 2004. Wildlife health in Africa: Implications for conservation in the decades ahead. In: *The Terrestrial Ecoregions of Africa and Madagascar: A Conservation Assessment*. Eds. J. D'Amico-Hales, E. Underwood, E. Dinerstein, D. Olson, J. Itoua, J. Schipper, T. Rickerts, and K. Newman. Washington D.C.: Island Press.
- Deem, S. L., A. J. Noss, R. Villarroel, M. M. Uhart, and W. B. Karesh. 2004. Disease survey of free-ranging grey brocket deer (*Mazama gouazoubira*) in the Gran Chaco, Bolivia. *Journal of Wildlife Diseases* 40, no. 1: 92-98.
- Fromenty, Pierre, William Karesh, Jean-Marc Fromenty, and Janette Wallis. 2003. Infectious diseases in West Africa: A common threat to chimpanzees and humans. In: *Status Survey and Action Plan West African Chimpanzees*. Eds. Rebecca Kormos, Christophe Boesch, Mohamed Bakarr, and Thomas Butynski, 169-74. Gland, Switzerland: IUCN.
- Leppert, Lynda L., Seth Layman, Evgeny A. Bragin, and Todd Katzner. 2004. Survey for hemoparasites in imperial eagles (*Aquila heliaca*), steppe eagles (*Aquila nipalensis*), and white-tailed sea eagles (*Haliaeetus albicilla*) from Kazakhstan. *Journal of Wildlife Diseases* 40, no. 2: 316-19.
- Leroy, Eric, Pierre Roquet, Pierre Fromenty, Sandrine Souquiere, Annelisa Kilbourn, Jean-Marc Fromenty, Magdalena Bermejo, Sheila Smit, William Karesh, Robert Swanepoel, Sherif Zaki, and Pierre Rollin. 2004. Multiple Ebola virus transmission events and rapid decline of central African wildlife. *Science* 303, no. 16: 387-90.
- Raphael, Bonnie L., Penny Kalk, Patrick Thomas, Paul P. Calle, James G. Doherty, and Robert A. Cook. 2003. Use of melengestrol acetate in feed for contraception in herds of captive ungulates. *Zoo Biology* 22, no. 5: 455-63.
- Uhart, Marcela., W. Prado, D. Moreno, H. Ferreyra, C. Rossetti, C. Fabbri, and Karesh, W. B. 2003. Estado sanitario y uso sostenible de yacares overo (*Caiman latrostris*) y Negro (*C. yacare*) del Chaco Argentino. In: *Manejo de fauna silvestre en Amazonía y Latinoamérica: selección de trabajos V Congreso Internacional*. Ed. R. Polanco-Ochoa, 30-36. Bogotá, Colombia: CITES, Fundación Natura.
- Uhart, Marcela, Flavio Quintana, William Karesh, and Emmett Braselton. 2003. Hematology, plasma biochemistry, and serosurvey for selected infectious agents in southern giant petrels from Patagonia, Argentina. *Journal of Wildlife Diseases* 39, no. 2: 359-65.

# facts, awards, credits

■ The New York Aquarium was awarded a grant from the Institute of Museum and Library Services (IMLS) to research message delivery methods for an interpretive exhibit focusing on dolphin cognition, with the goal of changing how dolphins and other marine mammals are exhibited and understood by the public. Central Park Zoo also received an IMLS grant, to create its first Poet-in-Residence program, to offer visitors a fully integrated poetry experience. Working with the not-for-profit Poet's House, the zoo selected acclaimed poet Sandra Alcosser to identify poems that convey the importance and spirit of conservation.

■ George Schaller received a Lifetime Achievement Award from the Jackson Hole Wildlife Film Festival, and the Salim Ali Conservation Award from the Bombay Natural History Society.

■ Alan Rabinowitz received the Lowell Thomas Award from the Explorers Club for his achievements to protect jaguars, leopards, and tigers.

■ Graham Harris won the prestigious Biodiversity Leadership Award from the Bay Foundation and the Josephine Bay Paul and C. Michael Paul Foundation, for his lifelong commitment to defending terrestrial wildlife in southernmost South America.

■ The Pew Institute for Ocean Science and its Pew Fellows Program in Marine Conservation named Claudio Campagna a Marine Conservation Fellow. Campagna specializes in large marine mammals for the National Research Council of Argentina and is spearheading WCS's Sea & Sky Initiative to improve fishery management in the southwest Atlantic Ocean.

■ UNESCO awarded World Heritage Site status to two long-term WCS sites, Mamirauá and Amanã Sustainable Development Reserves in Brazil. The designation means that the site is considered important for humanity, and for that reason will have access to special sources of financing to guarantee its preservation.

■ *Condé Nast Traveler* Magazine named Brazil's Mamirauá Sustainable Development Reserve, a long-term WCS site, the top Ecotourism Destination for 2003. Chosen from almost 100 nominees around the world, Mamirauá's ecotourism program was singled out for its preservation of the natural environment and support of local populations. Mamirauá also won the prestigious *Smithsonian* Magazine/TCF Sustainable Tourism Award in the conservation category.

■ The Sociedade Civil Mamirauá, a Brazilian NGO and WCS partner, was one of the winners of the Equator Prize 2004, a biennial award of the Equatorial Initiative. The award is in recognition of the work of community initiatives implemented in the equatorial belt, which have promoted the reduction of poverty through conservation and the sustainable use of biodiversity.

■ Joe Walston, with WCS Cambodia, received a gold medal from Prime Minister Hun Sen for his contributions to conservation in that country.

■ Michael Klemens was awarded a certificate of appreciation by the Westchester County Parks Department, New York, for efforts to safeguard Ward Pound Ridge Reservation.

■ Bronx Zoo Herpetology Curator John Behler was honored as the South Fork Natural History Society's Man of the Year for his reptile and amphibian conservation work.

## OPERATING EXPENSES

Bronx Zoo	\$43,002,000
New York Aquarium	10,243,000
City Zoos	13,706,000
International Conservation	43,777,000
Lower Bronx River	
Habitat Restoration	1,923,000
Wildlife Conservation Magazine	1,351,000

Total Program Expenses \$114,002,000

Visitor Services 10,122,000

Supporting Services 15,986,000

Total  
Wildlife Conservation Society \$144,110,000

## ATTENDANCE AT WCS FACILITIES

Bronx Zoo	1,937,430
Congo Gorilla Forest	683,568
Butterfly Zone	217,931
Children's Zoo	363,561
Zoo Shuttle	228,392
Bengali Express	335,917
Skyfari	407,612

New York Aquarium 703,969

Central Park Zoo 885,539

Prospect Park Zoo 222,834

Queens Zoo 202,810

Total WCS Attendance 3,952,810

## MEMBERSHIP AND MAGAZINE

Members	87,121
Wildlife Conservation circulation	161,310

## ANIMAL CENSUS

### Bronx Zoo

#### Mammals

2,375 animals of 131 species  
1,005 births

#### Birds

972 animals of 201 species  
92 hatchings

#### Reptiles and Amphibians

851 animals of 134 species  
128 births and hatchings

### Children's Zoo, Bronx Zoo

#### Mammals

203 animals of 37 species  
16 births

#### Birds

169 animals of 40 species  
4 hatchings

#### Reptiles and Amphibians

196 animals of 38 species

### New York Aquarium

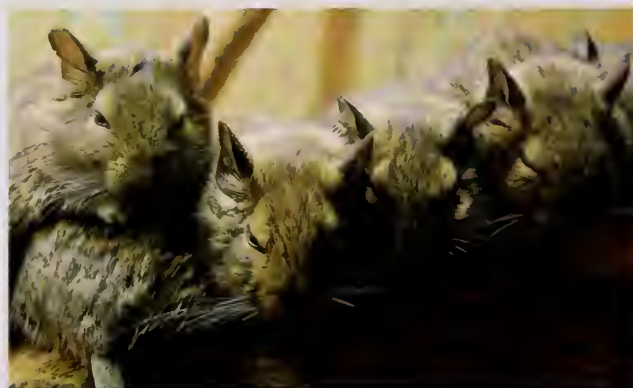
#### Mammals

25 animals of 8 species

#### Birds

26 animals of 1 species

#### Reptiles and Amphibians



23 animals of 4 species

#### Fish

2,394 animals of 250 species

#### Invertebrates

26 births  
9,054 animals of 143 species

164 animals of 36 species

#### Reptiles

170 animals of 7 species

#### Birds

26 hatchings

### Central Park Zoo

#### Mammals

255 animals of 24 species

#### Birds

650 births  
271 birds of 63 species

### St. Catherines Wildlife Survival Center

#### Mammals

147 animals of 16 species

#### Birds

42 births and hatchings

73 hatchings  
Reptiles and Amphibians  
1,049 of 48 species  
3 births and hatchings

### Queens Zoo

#### Mammals

111 animals of 22 species  
14 births

#### Birds

217 animals of 36 species

#### Reptiles

52 animals of 8 species

### Prospect Park Zoo

#### Mammals

105 animals of 22 species  
32 births

#### Birds

89 animals of 30 species  
13 hatchings

#### Reptiles and Amphibians

223 animals of 41 species  
26 births and hatchings

## Total WCS Census

19,141 animals of 1,340 species





WCS began working on Argentina's Patagonia coast in 1964 to protect colonies of Magellanic penguins, South American sea lions, and southern elephant seals. Above, Conservation Zoologist Claudio Campagna with a radio-tagged elephant seal. Opposite: Degus in the Bronx Zoo's Mouse House.

**EDITOR:** Deborah A. Behler

**CREATIVE DIRECTOR:** Julie Larsen Maher

**STAFF PHOTOGRAPHER:** Dennis DeMello

**PREPRESS:** Four Lakes Colorgraphics

**PRINTER:** Monroe Litho

**PAPER:** Printed on Gleneagle—a recycled, chlorine-free and acid-free paper

## Recommended Form of Bequest

The Trustees of the Wildlife Conservation Society recommend that for estate planning purposes, members and friends consider the following language for use in their wills: "To the Wildlife Conservation Society, a not-for-profit, tax-exempt organization incorporated in the State of New York in 1895, having as its principal address the Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York 10460, I hereby give and bequeath \_\_\_\_\_ for the Society's general purposes."

In order to help WCS avoid future administration costs, it is suggested that the following paragraph be added to any restrictions that are imposed on a bequest: "If at some future time, in the judgment of the Trustees of the Wildlife Conservation Society, it is no longer practical to use the income or principal of this bequest for the purposes intended, the Trustees have the right to use the income or principal for whatever purposes they deem necessary and most closely in accord with the intent described herein."

If you wish to discuss the language of your bequest with a member of the WCS staff, please be in touch with the Planned Giving Office at 718-220-5090.

**PICTURE CREDITS:** front cover: Julie Larsen Maher; back cover: Joe Pontecorvo (2), Luke Hunter, A. Rybin; page 1: Julie Larsen Maher; pages 2-3: Peter J. Ersts; page 4: Julie Larsen Maher; page 5: Kristine Bosworth; pages 6-7: Julie Larsen Maher; pages 8-9: Dennis DeMello/WCS; page 10: Kent Redford (4); page 11: James M. Large, Jr. (4); pages 12-13: Julie Larsen Maher (9); pages 14-15: Julie Larsen Maher; page 16: John L. Behler; page 17: Ron Magill; page 18: Chad Seewagen; page 19: Julie Larsen Maher; page 20: David Morales; pages 21-22: Dennis DeMello/WCS; page 23: Julie Larsen Maher; page 24: Dennis DeMello/WCS; page 25: Michael Kock; pages 26-27: Peter J. Ersts, inset, Julie Larsen Maher; page 28: Julie Larsen Maher (3); page 29: Michael Corrado, Julie Larsen Maher (4); pages 30-31: Julie Larsen Maher; page 32: Georges Dremeaux; page 33: Julie Larsen Maher; pages 34-35: Joshua Krause; page 37: Dennis DeMello/WCS; page 38: Joshua Krause; page 39: Julie Larsen Maher; pages 40-41: Charles and Lara Foley; page 42: David Moyer; page 43: Luis Claudio Marigo; page 44: Steve Winter; page 45: John Goodrich; page 46: Dennis DeMello/WCS; page 47: Tim Davenport; page 48: Julie Larsen Maher; page 50: Tim Collins, ASF; page 51: Andrew Plumtre; page 52: Antony Lynam; page 53: WCS/Myanmar; page 54: Elizabeth Bennett (2); page 55: Timothy Painter; page 56: Cathi Campbell; page 57: Heather Fenner; page 58: Audrey Magoun; page 60: Luke Hunter, Julie Larsen Maher; page 61: Julie Larsen Maher; page 63: Julie Larsen Maher; page 64: Dennis DeMello/WCS (3), Suzanne Bolduc (1), Diane Shapiro (1); page 65: Dennis DeMello/WCS (2), Diane Shapiro (2), Julie Larsen Maher (1); page 67: Patricia Calabrese; page 70: Mary Hilliard, Patrick McMullan Co., Inc., Julie Larsen Maher (3); page 71: Julie Larsen Maher (5); page 72: Roger LeMoine (4), Julie Larsen Maher (4); page 73: Peter J. Ersts (4), Julie Larsen Maher (1); page 74: Julie Larsen Maher; page 76: Julie Larsen Maher; page 78: Claudio Campagna; page 82: Tim Collins; page 84: Diane Shapiro; page 85: Matt Leslie; page 86: Julie Larsen Maher; page 88: Julie Larsen Maher; page 92: Julie Larsen Maher; page 94: Pete Copolillo; page 96: Julie Larsen Maher; inside back cover: WCS.

For information on how you can support the Wildlife Conservation Society, please call our Development Department at 718-220-5090. A copy of this annual report may be obtained by writing to the Office of the Chairman, Wildlife Conservation Society, 2300 Southern Boulevard, Bronx, New York 10460. In addition, a copy of WCS's annual filing with the Charities Bureau of the Office of the New York State Attorney General may be obtained by writing to the Charities Bureau, New York State Attorney General's Office, 3rd Floor, 120 Broadway, New York, New York 10271.



wildlife conservation society

Bronx Zoo ■ 2300 Southern Boulevard ■ Bronx, New York 10460

[www.wcs.org](http://www.wcs.org)